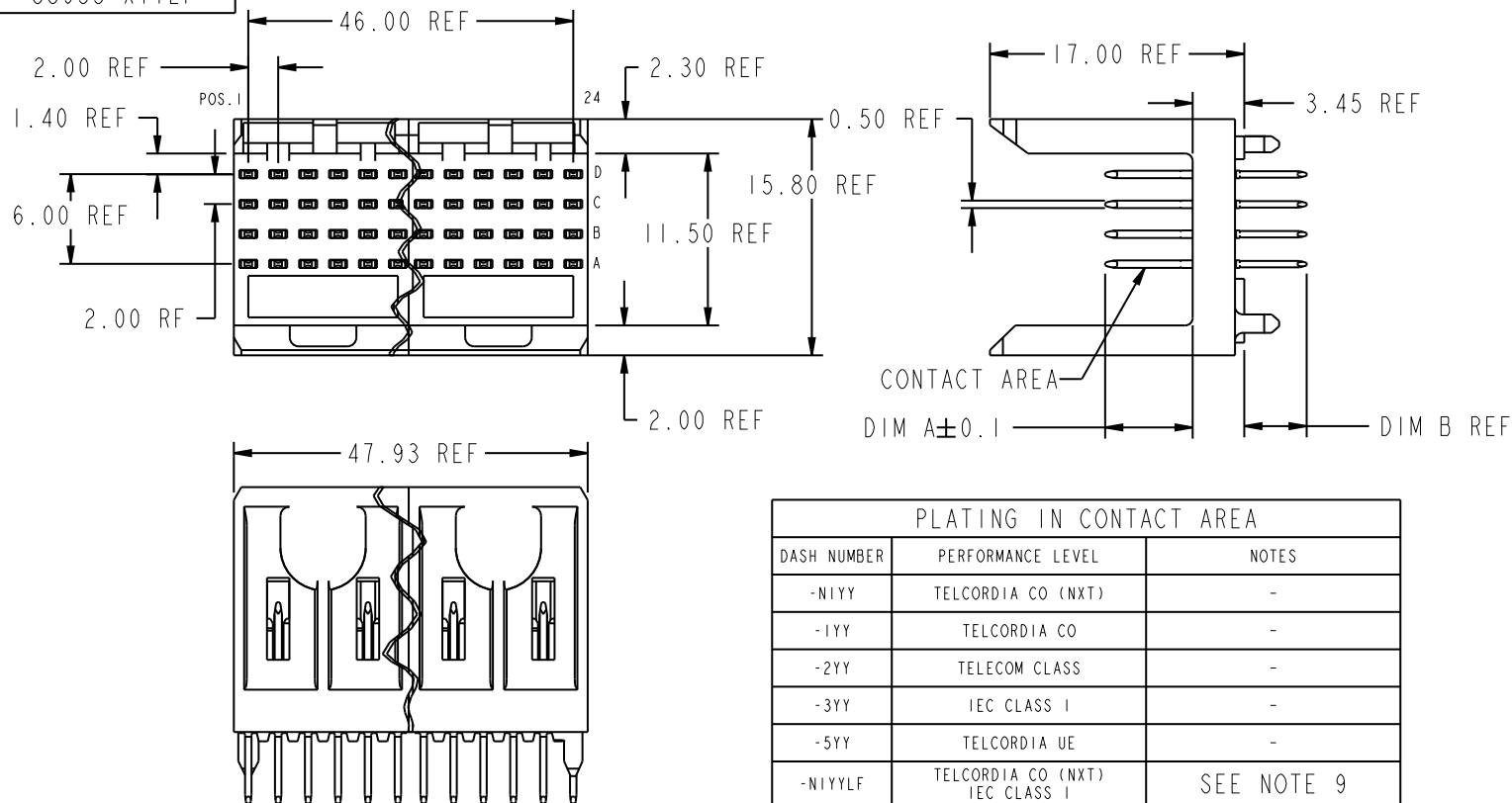
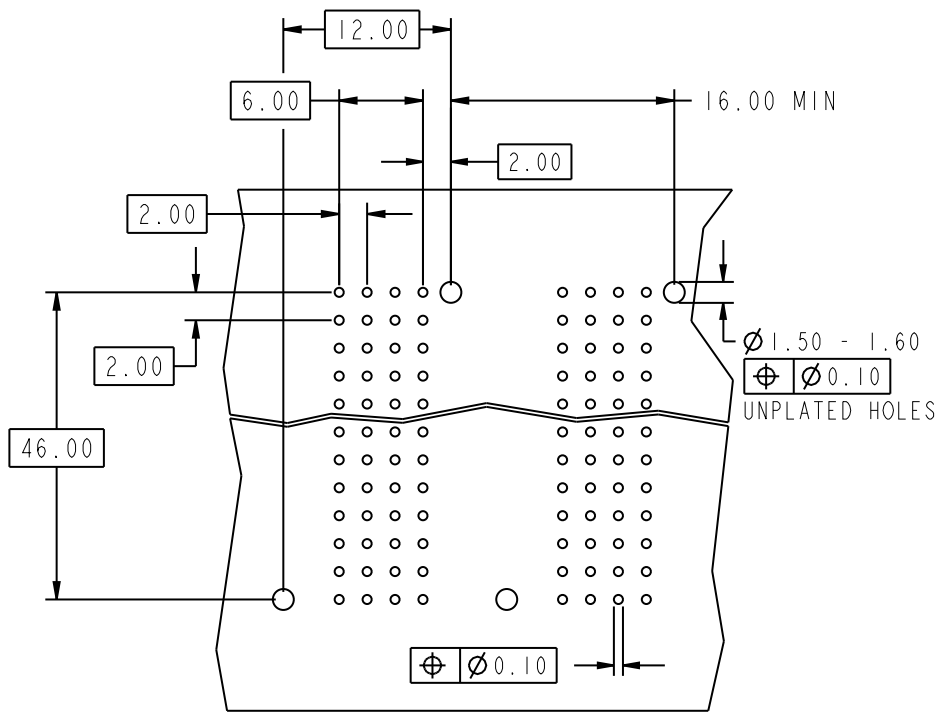




PRODUCT NUMBER  
88953-XY  
88953-XYLF

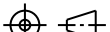
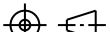


| mat'l code |           |     |            | tolerances unless otherwise specified |                  |                 |                  | CUSTOMER   |                      | FCI                |        |
|------------|-----------|-----|------------|---------------------------------------|------------------|-----------------|------------------|------------|----------------------|--------------------|--------|
| ltr        | ecr no.   | dr  | date       | linear                                | 0.X $\pm 0.3$    | 0.XX $\pm 0.13$ | .XXX $\pm 0.051$ | projection | title                | www.fciconnect.com |        |
| U          | V06-0569  | DCH | 2006-06-13 | linear                                |                  |                 |                  |            | METRAL SIGNAL HEADER |                    |        |
| V          | DG09-0256 | TER | 2009-08-19 | linear                                |                  |                 |                  |            | 4 MOD, 4 ROW STB     |                    |        |
| -          | -         | -   | -          | angles                                | 0° $\pm 2^\circ$ |                 |                  |            |                      |                    |        |
| P          | V03-1059  | DAI | 09/24/03   | dr                                    | T.BRUNGARD       | 11/19/99        |                  |            | product family       | METRAL             | code   |
| R          | V05-0385  | DAI | 04/22/05   | enrg                                  | M.STRAWER        | 11/19/99        |                  |            | size                 | dwg no             | 213    |
| S          | V05-0796  | DAI | 08/19/05   | chr                                   | M.STRAWER        | 11/19/99        |                  |            | 88953                |                    | sheet  |
| T          | V06-0123  | DAI | 02/09/06   | appd                                  | M.STRAWER        | 02/29/00        |                  |            | A                    |                    | 1 of 8 |
| sheet      | revision  | V   | V          | V                                     | V                | V               | V                | V          |                      |                    |        |
| index      | sheet     | 1   | 2          | 3                                     | 4                | 5               | 6                | 7          |                      |                    |        |



| KEY (SIGNAL STB) |                 |                 |
|------------------|-----------------|-----------------|
| CODE             | DIMENSIONS      |                 |
|                  | DIM "A"<br>MATE | DIM "B"<br>TAIL |
| 1                | 5.00            | 4.25            |
| 2                | 5.75            | 4.25            |
| 3                | 6.50            | 4.25            |
| 4                | 7.25            | 4.25            |
| 5                | 5.00            | 3.38            |
| 6                | 5.75            | 3.38            |
| 7                | 6.50            | 3.38            |
| 8                | 7.25            | 3.38            |
| 9                | 5.00            | 2.65            |
| 10               | 5.75            | 2.65            |
| 11               | 6.50            | 2.65            |
| 12               | 7.25            | 2.65            |
| 13               | 8.00            | 4.25            |

REQUIRED PC BOARD LAYOUT  
COMPONENT SIDE  
SEE PRINT 58351 FOR  
ADDITIONAL PCB INFORMATION

|            |          |      |            |                                          |            |                                                                                       |                                                                                       |        |                                          |                    |  |
|------------|----------|------|------------|------------------------------------------|------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|------------------------------------------|--------------------|--|
| mat'l code |          |      |            | tolerances unless<br>otherwise specified |            | CUSTOMER                                                                              |                                                                                       | FCI    |                                          | www.fciconnect.com |  |
| ltr        | ecn no.  | dr   | date       | linear                                   | 0.X ±0.3   | projection                                                                            | COPY                                                                                  | title  | METRAL SIGNAL HEADER<br>4 MOD, 4 ROW STB |                    |  |
| V          |          |      |            |                                          | 0.XX ±0.13 |                                                                                       |                                                                                       |        |                                          |                    |  |
|            |          |      |            | angles                                   | .XXX ±.051 |  |  |        | product family METRAL code 213           |                    |  |
|            |          |      |            |                                          | 0° ±2°     |                                                                                       |                                                                                       |        |                                          |                    |  |
|            |          | dr   | T.BRUNGARD | 11/19/99                                 | MM         |  | size                                                                                  | dwg no | 88953                                    |                    |  |
|            |          | enrg | M.STRAWSER | 11/19/99                                 |            |                                                                                       |                                                                                       |        |                                          |                    |  |
|            |          | chr  | M.STRAWSER | 11/19/99                                 | scale      | 1:1                                                                                   | A                                                                                     |        |                                          |                    |  |
|            |          | appd | M.STRAWSER | 02/29/00                                 |            |                                                                                       |                                                                                       |        |                                          |                    |  |
| sheet      | revision |      |            |                                          |            |                                                                                       |                                                                                       |        |                                          |                    |  |
| index      | sheet    |      |            |                                          |            |                                                                                       |                                                                                       |        |                                          |                    |  |



| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X01<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | C   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | B   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | A   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X02<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | C   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | B   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | A   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X03<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | C   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | B   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | A   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X04<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  |
|                                                     | C   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | B   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | A   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X05<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | C   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | B   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | A   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X06<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | C   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | B   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | A   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X07<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | C   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | B   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | A   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1      | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X08<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | C   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1      | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | B   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1      | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | A   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1      | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X09<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4      | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  |
|                                                     | C   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4      | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  |
|                                                     | B   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4      | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  |
|                                                     | A   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4      | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X10<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1      | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
|                                                     | C   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2      | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | B   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | A   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4      | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  |

|            |          |    |      |                                          |                     |               |                          |                                                   |            |
|------------|----------|----|------|------------------------------------------|---------------------|---------------|--------------------------|---------------------------------------------------|------------|
| mat'l code |          |    |      | tolerances unless<br>otherwise specified |                     | CUSTOMER      |                          | FCJ<br>www.fcjconnect.com                         |            |
| l/r        | ecn no.  | dr | date | linear                                   | 0.X ±0.3            | projection    |                          | title<br>METRAL SIGNAL HEADER<br>4 MOD, 4 ROW STB |            |
| V          |          |    |      |                                          | 0.XX ±0.13          |               |                          |                                                   |            |
|            |          |    |      |                                          | .XXX ±.051          |               |                          |                                                   |            |
|            |          |    |      | angles                                   | 0° ±°               |               | product family<br>METRAL | code<br>213                                       | sheet<br>3 |
|            |          |    |      | dr                                       | T.BRUNGARD 11/19/99 |               |                          |                                                   |            |
|            |          |    |      | enrg                                     | M.STRAWSE 11/19/99  |               |                          |                                                   |            |
|            |          |    |      | chr                                      | M.STRAWSE 11/19/99  |               |                          |                                                   |            |
|            |          |    |      | appd                                     | M.STRAWSE 02/29/00  | size<br>88953 | A                        | dwg no<br>88953                                   | sheet<br>3 |
| sheet      | revision |    |      |                                          |                     |               |                          |                                                   |            |
| index      | sheet    |    |      |                                          |                     |               |                          |                                                   |            |



| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                    |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X11                          | D   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                    | B   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                    | A   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                    |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X12                          | D   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                    | B   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                    | A   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                    |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X13                          | D   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                    | B   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                    | A   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                    |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X15                          | D   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |
|                                    | B   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                    | A   | 1                      | 1 | 1 | 1 | 1 | 1      | 1 | 1 | 1 | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1      | 1  | 1  | 1  | 1  | 1  | 1  |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                    |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X16                          | D   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                    | B   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  |
|                                    | A   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

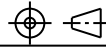
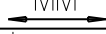
| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X17<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | C   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | B   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | A   | 3                      | 3 | 3 | 3 | 3 | 3      | 3 | 3 | 3 | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X31<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | C   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | B   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | A   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X32<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | C   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | B   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | A   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X33<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | C   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | B   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | A   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X34<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                     | C   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | B   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | A   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |

|            |          |    |      |                                          |            |            |                                                                                       |                                                                                                          |        |  |
|------------|----------|----|------|------------------------------------------|------------|------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------|--|
| mat'l code |          |    |      | tolerances unless<br>otherwise specified |            | CUSTOMER   |                                                                                       |  www.fcjconnect.com |        |  |
| lfr        | ecr no.  | dr | date | linear                                   | 0.X ±0.3   | projection |  | title                                                                                                    |        |  |
| V          |          |    |      |                                          | 0.XX ±0.13 |            |                                                                                       | METRAL SIGNAL HEADER                                                                                     |        |  |
|            |          |    |      |                                          | .XXX ±.051 |            |                                                                                       | 4 MOD, 4 ROW STB                                                                                         |        |  |
|            |          |    |      | angles                                   | 0° ±2°     | MM         |  | product family                                                                                           |        |  |
|            |          |    |      | dr                                       | T.BRUNGARD |            |                                                                                       | 11/19/99                                                                                                 | METRAL |  |
|            |          |    |      | enrg                                     | M.STRAWSE  |            |                                                                                       | 11/19/99                                                                                                 | code   |  |
|            |          |    |      | chr                                      | M.STRAWSE  | 11/19/99   | scale                                                                                 | size                                                                                                     |        |  |
|            |          |    |      | appd                                     | M.STRAWSE  | 02/29/00   |                                                                                       | dwg no                                                                                                   |        |  |
|            |          |    |      |                                          |            |            |                                                                                       | 88953                                                                                                    |        |  |
| sheet      | revision |    |      |                                          |            |            |                                                                                       | 213                                                                                                      |        |  |
| index      | sheet    |    |      |                                          |            |            |                                                                                       | sheet                                                                                                    |        |  |
|            |          |    |      |                                          |            |            |                                                                                       | 4                                                                                                        |        |  |



| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X35<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | C   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | B   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | A   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X36<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | C   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | B   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | A   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X37<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | C   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | B   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | A   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X38<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | C   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | B   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | A   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |

| METRAL<br>P/N                                      | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                    |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 8895-X39<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                    | C   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                    | B   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                    | A   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X40<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | C   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | B   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | A   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X41<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | C   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | B   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | A   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X42<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                     | C   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | B   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | A   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X43<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | C   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | B   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | A   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X45<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | C   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |
|                                                     | B   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | A   | 5                      | 5 | 5 | 5 | 5 | 5      | 5 | 5 | 5 | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5      | 5  | 5  | 5  | 5  | 5  | 5  |

|             |         |                |      |                                          |                     |  |  |                     |                      |  |  |                           |  |  |  |
|-------------|---------|----------------|------|------------------------------------------|---------------------|--|--|---------------------|----------------------|--|--|---------------------------|--|--|--|
| mat'l code  |         |                |      | tolerances unless<br>otherwise specified |                     |  |  | CUSTOMER            |                      |  |  | FCI<br>www.fciconnect.com |  |  |  |
| lfr         | ecr no. | dr             | date | linear                                   | 0.X ±0.3            |  |  | projection          | COPY                 |  |  | title                     |  |  |  |
| V           |         |                |      |                                          | 0.XX ±0.13          |  |  |                     | METRAL SIGNAL HEADER |  |  |                           |  |  |  |
|             |         |                |      |                                          | .XXX ±0.051         |  |  |                     | 4 MOD, 4 ROW STB     |  |  |                           |  |  |  |
|             |         |                |      | angles                                   | 0° ±2°              |  |  | <br>MM<br>scale 1:1 | product family       |  |  | code                      |  |  |  |
|             |         |                |      | dr                                       | T.BRUNGARD 11/19/99 |  |  |                     | METRAL               |  |  | 213                       |  |  |  |
|             |         |                |      | enrg                                     | M.STRAWSE 11/19/99  |  |  |                     | size                 |  |  | sheet                     |  |  |  |
|             |         |                |      | chr                                      | M.STRAWSE 11/19/99  |  |  |                     | 88953                |  |  | 5                         |  |  |  |
|             |         |                |      | appd                                     | M.STRAWSE 02/29/00  |  |  |                     |                      |  |  |                           |  |  |  |
| sheet index |         | revision sheet |      |                                          |                     |  |  |                     |                      |  |  |                           |  |  |  |



| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X46<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | C   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |
|                                                     | B   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                     | A   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X47<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | C   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | B   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | A   | 7                      | 7 | 7 | 7 | 7 | 7      | 7 | 7 | 7 | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7      | 7  | 7  | 7  | 7  | 7  | 7  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X61<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 9                      | 9 | 9 | 9 | 9 | 9      | 9 | 9 | 9 | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | C   | 9                      | 9 | 9 | 9 | 9 | 9      | 9 | 9 | 9 | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | B   | 9                      | 9 | 9 | 9 | 9 | 9      | 9 | 9 | 9 | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | A   | 9                      | 9 | 9 | 9 | 9 | 9      | 9 | 9 | 9 | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X62<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | C   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | B   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | A   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X63<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | C   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | B   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | A   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |

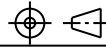
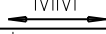
| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X64<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 |
|                                                     | C   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | B   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | A   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X65<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | C   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | B   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | A   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X66<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | C   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | B   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | A   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X67<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | C   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | B   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | A   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X68<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | C   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | B   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | A   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |

|            |         |    |      |                                          |                     |            |                                                                                       |                                                                                                          |  |
|------------|---------|----|------|------------------------------------------|---------------------|------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--|
| mat'l code |         |    |      | tolerances unless<br>otherwise specified |                     | CUSTOMER   |                                                                                       |  www.fcjconnect.com |  |
| lfr        | ecn no. | dr | date | linear                                   | 0.X ±0.3            | projection |  | title                                                                                                    |  |
| V          |         |    |      |                                          | 0.XX ±0.13          |            |                                                                                       | METRAL SIGNAL HEADER                                                                                     |  |
|            |         |    |      |                                          | .XXX ±.051          |            |                                                                                       | 4 MOD, 4 ROW STB                                                                                         |  |
|            |         |    |      | angles                                   | 0° ±2°              | scale      |  | product family                                                                                           |  |
|            |         |    |      | dr                                       | T.BRUNGARD 11/19/99 |            |                                                                                       | METRAL                                                                                                   |  |
|            |         |    |      | enrg                                     | M.STRAWSE           |            |                                                                                       |                                                                                                          |  |



| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                    |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X69                          | D   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
|                                    | B   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
|                                    | A   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                    |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X70                          | D   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
|                                    | B   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
|                                    | A   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                    |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X71                          | D   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  |
|                                    | B   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
|                                    | A   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                    |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X72                          | D   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
|                                    | B   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
|                                    | A   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  |

| METRAL<br>P/N                      | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    | MOD. 3 |    |    |    |    | MOD. 4 |    |    |    |    |    |    |    |    |
|------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|----|----|----|----|
|                                    |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X73                          | D   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  |
| SEE NOTE 10<br>LEAD FREE<br>OPTION | C   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  |
|                                    | B   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
|                                    | A   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  |

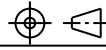
| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X75<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | C   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |
|                                                     | B   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | A   | 9                      | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9      | 9  | 9  | 9  | 9  | 9  | 9  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X76<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | C   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | B   | 12                     | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12     | 12 | 12 | 12 | 12 | 12 | 12 |
|                                                     | A   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X77<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | C   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | B   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | A   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X78<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | C   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |
|                                                     | B   | 4                      | 4 | 4 | 4 | 4 | 4      | 4 | 4 | 4 | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  |
|                                                     | A   | 2                      | 2 | 2 | 2 | 2 | 2      | 2 | 2 | 2 | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2      | 2  | 2  | 2  | 2  | 2  | 2  |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X79<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 3                      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | C   | 4                      | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4      | 4  | 4  | 4  | 4  | 4  | 4  |
|                                                     | B   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |
|                                                     | A   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |

|            |         |    |      |                                          |            |            |                                                                                       |                                                                                                          |        |  |
|------------|---------|----|------|------------------------------------------|------------|------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------|--|
| mat'l code |         |    |      | tolerances unless<br>otherwise specified |            | CUSTOMER   |                                                                                       |  www.fcjconnect.com |        |  |
| lfr        | ecn no. | dr | date | linear                                   | 0.X ±0.3   | projection |  | title                                                                                                    |        |  |
| V          |         |    |      |                                          | 0.XX ±0.13 |            |                                                                                       | METRAL SIGNAL HEADER                                                                                     |        |  |
|            |         |    |      |                                          | .XXX ±.051 |            |                                                                                       | 4 MOD, 4 ROW STB                                                                                         |        |  |
|            |         |    |      | angles                                   | 0° ±°      | MM         |  | product family                                                                                           |        |  |
|            |         |    |      | dr                                       | T.BRUNGARD |            |                                                                                       | 11/19/99                                                                                                 | METRAL |  |
|            |         |    |      | enrg                                     | M.STRAWSE  |            |                                                                                       | 11/19/99                                                                                                 | code   |  |
|            |         |    |      | chr                                      |            |            |                                                                                       |                                                                                                          |        |  |



| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X80<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 3                      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | C   | 3                      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |
|                                                     | B   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |
|                                                     | A   | 3                      | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3      | 3  | 3  | 3  | 3  | 3  | 3  |

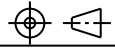
| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X81<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |
|                                                     | C   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |
|                                                     | B   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |
|                                                     | A   | 13                     | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13     | 13 | 13 | 13 | 13 | 13 | 13 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |    |    |    |    | MOD. 2 |    |    |    |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2  | 3  | 4  | 5  | 6      | 7  | 8  | 9  | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X82<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | C   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |
|                                                     | B   | 11                     | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11     | 11 | 11 | 11 | 11 | 11 | 11 |
|                                                     | A   | 10                     | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10     | 10 | 10 | 10 | 10 | 10 | 10 |

| METRAL<br>P/N                                       | ROW | CONTACT CODE<br>MOD. 1 |   |   |   |   | MOD. 2 |   |   |   |    |    | MOD. 3 |    |    |    |    |    | MOD. 4 |    |    |    |    |    |    |
|-----------------------------------------------------|-----|------------------------|---|---|---|---|--------|---|---|---|----|----|--------|----|----|----|----|----|--------|----|----|----|----|----|----|
|                                                     |     | 1                      | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 88953-X83<br><br>SEE NOTE 10<br>LEAD FREE<br>OPTION | D   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | C   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |
|                                                     | B   | 8                      | 8 | 8 | 8 | 8 | 8      | 8 | 8 | 8 | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8      | 8  | 8  | 8  | 8  | 8  | 8  |
|                                                     | A   | 6                      | 6 | 6 | 6 | 6 | 6      | 6 | 6 | 6 | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6      | 6  | 6  | 6  | 6  | 6  | 6  |

#### NOTES:

- FOR DIM A AND B SEE SHEET 2 AND UP.
- BODY MATERIAL: LIQUID CRYSTAL  
POLYMER 30 % GLASS.  
FLAME RETARDANT ACC. UL 94-V0.
- PIN MATERIAL:  
PHOSPHOR BRONZE.
- PLATING SOLDER TO BOARD:  
88953 -XXX IS SnPb  
88953-XXYLF IS SN (LEAD FREE)  
PLATING ON CONTACT AREA CONFORMS TO PERFORMANCE  
LEVEL SHOWN IN TABLE.
- PRODUCT MARKING:  
PART NUMBER DESIGNATION & BATCH I.D.
- ALL PRODUCTS WITH PART NUMBERS SHOWN IN  
SUBSEQUENT TABLES WILL BE PACKAGED IN TUBES.  
IF TRAY PACKAGING IS REQUIRED, A SUFFIX "P"  
WILL BE ADDED TO THE END OF THE PART NUMBER.  
EXAMPLE: XXXXX-XXXP OR XXXXX-XXXPLF
- PRODUCT SPECIFICATION GS-12-180  
APPLICATION SPECIFICATION BUS-20-074
- A PLATING HAS Au FLASH IN PRESS FIT  
AREA (LEAD FREE).
- THE PRODUCTS WHERE THE PART NUMBER ENDS IN LF MEET THE  
EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS  
AS DESCRIBED IN GS-22-008.
- FOR LEAD FREE PART NUMBERS, ADD AN "LF" SUFFIX.  
EXAMPLE: 88953-X0ILF
- ALL PRODUCTS EXCEPT THOSE WITH PART NUMBERS CONTAINING  
(DRAWING NO.)-N1--- OR (DRAWING NO.)-N5---WILL WITHSTAND EXPOSURE  
TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR  
VAPOR PHASE REFLOW OVEN. PART NUMBERS (DRAWING NO.)-N1---  
AND (DRAWINGS NO.)-N5---WILL NOT WITHSTAND REFLOW AND Au CONTACT  
SURFACE OF THE CONTACTS SHALL BE EXPOSED TO A MAXIMUM 140°C FOR  
NO LONGER THAN 15 SECONDS IN A WAVE SOLDER APPLICATION.

|                |                   |    |      |                                          |                     |                                                                                       |                          |                                                                                                          |                                                   |
|----------------|-------------------|----|------|------------------------------------------|---------------------|---------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| mat'l code     |                   |    |      | tolerances unless<br>otherwise specified |                     | CUSTOMER                                                                              |                          |  www.fciconnect.com |                                                   |
| ltr            | ecn no.           | dr | date | linear                                   | 0.X ±0.3            | COPY                                                                                  |                          | projection                                                                                               | title<br>METRAL SIGNAL HEADER<br>4 MOD, 4 ROW STB |
| V              |                   |    |      |                                          | 0.XX ±0.13          |                                                                                       |                          |                                                                                                          |                                                   |
|                |                   |    |      |                                          | .XXX ±.051          |                                                                                       |                          |                                                                                                          |                                                   |
|                |                   |    |      | angles                                   | 0° ±°               |  | product family<br>METRAL | code<br>213                                                                                              |                                                   |
|                |                   |    |      | dr                                       | T.BRUNGARD 11/19/99 |                                                                                       |                          |                                                                                                          |                                                   |
|                |                   |    |      | engr                                     | M.STRAWSE 11/19/99  |                                                                                       |                          |                                                                                                          |                                                   |
|                |                   |    |      | chr                                      | M.STRAWSE 11/19/99  | scale<br>1:1                                                                          | size<br>A                | dwg no<br>88953                                                                                          | sheet<br>8                                        |
|                |                   |    |      | appd                                     | M.STRAWSE 02/29/00  |                                                                                       |                          |                                                                                                          |                                                   |
| sheet<br>index | revision<br>sheet |    |      |                                          |                     |                                                                                       |                          |                                                                                                          |                                                   |

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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