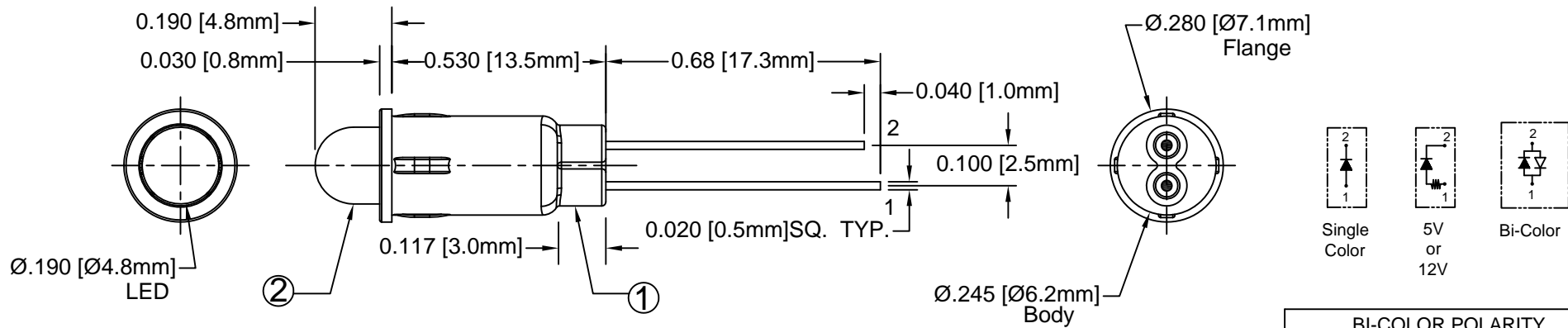
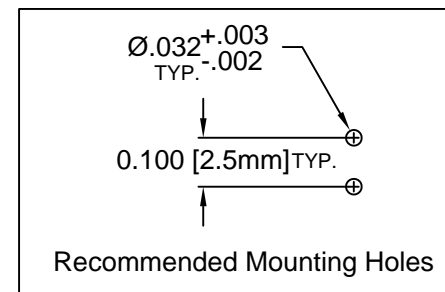
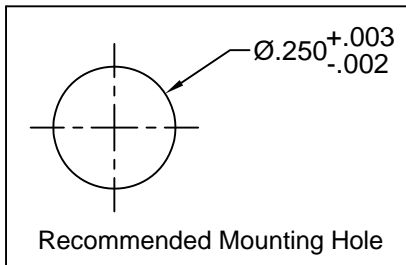
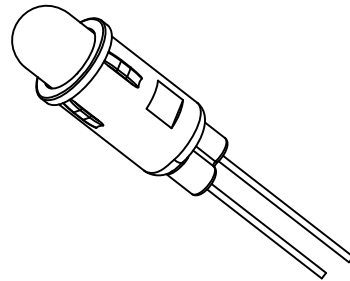


| ITEM | QTY | PART NUMBER | PART DESCRIPTION   |
|------|-----|-------------|--|
| 1    | 1   | PM5-XXX     | LED holder, Panel Mount, Press Fit (5mm)<br>PM5 (Standard LED), PM5-5V (5V LED), & PM5-12V (12V LED) |
| 2    | 1   | 5XX         | T1 3/4 (5mm) Non-Flange LED, See Following Pages   |

| REV. | DESCRIPTION                          | DATE     | APPROVED |
|------|--------------------------------------|----------|----------|
| A    | Engineering Release.                 | 12/20/05 | M. C.    |
| B    | Added Bi-Color Specs.                | 02/09/10 | T. Y.    |
| C    | Updated LED Offering.                | 05/01/12 | T. Y.    |
| D    | Updated BOM item 1.                  | 11/13/12 | T. Y.    |
| E    | Updated LED Optical Characteristics. | 09/15/15 | J. C.    |




| BI-COLOR POLARITY |             |             |
|-------------------|-------------|-------------|
| LED P/N           | (1) Cathode | (2) Cathode |
| 5BC               | Green       | Red         |
| 5BC-Y/G           | Green       | Yellow      |
| 5BC-R/Y           | Yellow      | Red         |
| 5BC-A/G           | Green       | Amber       |


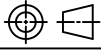


## ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)


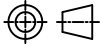
|  |       |                     |
|--|-------|---------------------|
| REVERSE VOLTAGE                              | _____ | 5V                  |
| REVERSE CURRENT (VR=5V)                      | _____ | 100µA               |
| OPERATING TEMPERATURE RANGE                  | _____ | -25°C ~ 85°C        |
| STORAGE TEMPERATURE                          | _____ | -30°C ~ 100°C       |
| LEAD SOLDERING TEMPERATURE (1/16" FROM BODY) | _____ | 260°C for 5 Seconds |

|  |                          |   |  |
|--|--------------------------|---|--|
| STANDARD TOLERANCE<br>(UNLESS OTHERWISE SPECIFIED) |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |  |
| DECIMALS   | ANGULAR                  |   |  |
| .X ± .1  | X° ± 1°                  | <b>TITLE:</b><br>STD PANEL MOUNT INDICATORS<br><b>PART NO:</b><br>PM5XX<br><b>REVISION:</b><br>E  |  |
| .XX ± .02  |                          |   |  |
| .XXX ± .010  |                          |   |  |
| DESIGNED:<br><b>Sonny Dam</b>                      | DATE:<br><b>12/20/05</b> | <b>CAGE CODE :</b> 32559 <b>SHEET #</b> 1 OF 4  |  |
| CHECKED:<br><b>T. Yin</b>                          | DATE:<br><b>12/20/05</b> | CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.   |  |

| LED Assy.No. | Chip      |                  |               | Lens Appearance | Electro-Optical Data @20mA |        |     |          | Viewing Angle 2 θ 1/2 (Deg) | LED P/N |     |
|--------------|-----------|------------------|---------------|-----------------|----------------------------|--------|-----|----------|-----------------------------|---------|-----|
|              | Material  | Peak Wave Length | Emitted Color |                 | If (mA)                    | Vf (V) |     | Iv (mcd) |                             |         |     |
|              |           |                  |               |                 |                            | MAX    | TYP | MAX      |                             |         | TYP |
| PM5BWC       | GaN/SiC   | 430              | BLUE          | WATER CLEAR     | 25                         | 4.0    | 4.5 | 25       | 20                          | 5BWC    |     |
| PM5BWD       | GaN/SiC   | 430              | BLUE          | DIFFUSED        | 25                         | 4.0    | 4.5 | 15       | 45                          | 5BWD    |     |
| PM5BWT       | GaN/SiC   | 430              | BLUE          | TINTED          | 25                         | 4.0    | 4.5 | 30       | 20                          | 5BWT    |     |
| PM5GC        | GaP/GaP   | 568              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.8 | 40       | 35                          | 5GC     |     |
| PM5GD        | GaP/GaP   | 568              | GREEN         | DIFFUSED        | 30                         | 2.1    | 2.8 | 25       | 45                          | 5GD     |     |
| PM5GT        | GaP/GaP   | 568              | GREEN         | TINTED          | 30                         | 2.1    | 2.8 | 40       | 35                          | 5GT     |     |
| PM5PGC       | GaP/GaP   | 555              | PURE GREEN    | WATER CLEAR     | 30                         | 2.2    | 2.8 | 10       | 35                          | 5PGC    |     |
| PM5PGD       | GaP/GaP   | 555              | PURE GREEN    | DIFFUSED        | 30                         | 2.2    | 2.8 | 10       | 45                          | 5PGD    |     |
| PM5PGT       | GaP/GaP   | 555              | PURE GREEN    | TINTED          | 30                         | 2.2    | 2.8 | 10       | 35                          | 5PGT    |     |
| PM5YC        | GaAsp/GaP | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.8 | 40       | 35                          | 5YC     |     |
| PM5YD        | GaAsp/GaP | 590              | YELLOW        | DIFFUSED        | 30                         | 2.0    | 2.8 | 25       | 45                          | 5YD     |     |
| PM5YT        | GaAsp/GaP | 590              | YELLOW        | TINTED          | 30                         | 2.0    | 2.8 | 40       | 35                          | 5YT     |     |
| PM5AC        | GaAsp/GaP | 605              | AMBER         | WATER CLEAR     | 30                         | 2.0    | 2.8 | 40       | 35                          | 5AC     |     |
| PM5AD        | GaAsp/GaP | 605              | AMBER         | DIFFUSED        | 30                         | 2.0    | 2.8 | 25       | 45                          | 5AD     |     |
| PM5AT        | GaAsp/GaP | 605              | AMBER         | TINTED          | 30                         | 2.0    | 2.8 | 40       | 35                          | 5AT     |     |
| PM5HC        | GaAsp/GaP | 625              | HE RED        | WATER CLEAR     | 30                         | 2.0    | 2.8 | 40       | 35                          | 5HC     |     |
| PM5HD        | GaAsp/GaP | 625              | HE RED        | DIFFUSED        | 30                         | 2.0    | 2.8 | 25       | 45                          | 5HD     |     |
| PM5HT        | GaAsp/GaP | 625              | HE RED        | TINTED          | 30                         | 2.0    | 2.8 | 40       | 35                          | 5HT     |     |
| PM5RC        | GaP/GaP   | 700              | RED           | WATER CLEAR     | 20                         | 2.1    | 2.8 | 2        | 35                          | 5RC     |     |
| PM5RD        | GaP/GaP   | 700              | RED           | DIFFUSED        | 20                         | 2.1    | 2.8 | 2        | 45                          | 5RD     |     |
| PM5RT        | GaP/GaP   | 700              | RED           | TINTED          | 20                         | 2.1    | 2.8 | 2        | 35                          | 5RT     |     |
| PM5BC-A/G    | GaAsp/GaP | 605              | AMBER         | WHITE DIFFUSED  | 30                         | 2.0    | 2.8 | 6        | 45                          | 5BC-A/G |     |
|              | GaP/GaP   | 568              | GREEN         |                 | 30                         | 2.1    | 2.8 | 6        |                             |         |     |
| PM5BC        | GaAsp/GaP | 625              | RED           | WHITE DIFFUSED  | 30                         | 2.0    | 2.8 | 6        | 45                          | 5BC     |     |
|              | GaP/GaP   | 568              | GREEN         |                 | 30                         | 2.1    | 2.8 | 8        |                             |         |     |
| PM5BC-R/Y    | GaAsp/GaP | 625              | RED           | WHITE DIFFUSED  | 30                         | 2.0    | 2.8 | 6        | 45                          | 5BC-R/Y |     |
|              | GaP/GaP   | 590              | YELLOW        |                 | 30                         | 2.0    | 2.8 | 5        |                             |         |     |
| PM5BC-Y/G    | GaAsp/GaP | 590              | YELLOW        | WHITE DIFFUSED  | 30                         | 2.0    | 2.8 | 5        | 45                          | 5BC-Y/G |     |
|              | GaP/GaP   | 568              | GREEN         |                 | 30                         | 2.1    | 2.8 | 8        |                             |         |     |


|   |                          |   |                       |
|---|--------------------------|---|-----------------------|
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| ANGULAR<br>X° ± 1°  |                          |    |                       |
| DESIGNED:<br><b>Sonny Dam</b>   | DATE:<br><b>12/20/05</b> | <b>TITLE:</b><br>STD PANEL MOUNT INDICATORS   |                       |
| CHECKED:<br><b>T. Yin</b>   | DATE:<br><b>12/20/05</b> | <b>PART NO:</b><br>PM5XX  | <b>REVISION:</b><br>E |
|   |                          | <b>CAGE CODE :</b> 32559  | <b>SHEET #</b> 2 OF 4 |
| CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.                       |                          |   |                       |

| LED Assy.No. | Chip        |                  |               | Lens Appearance | Electro-Optical Data @20mA |        |     |          | Viewing Angle<br>2 θ 1/2<br>(Deg) | LED P/N   |     |
|--------------|-------------|------------------|---------------|-----------------|----------------------------|--------|-----|----------|-----------------------------------|-----------|-----|
|              | Material    | Peak Wave Length | Emitted Color |                 | If (mA)                    | Vf (V) |     | Iv (mcd) |                                   |           |     |
|              |             |                  |               |                 |                            | MAX    | TYP | MAX      |                                   |           | TYP |
| PM5UBWC      | InGaN/SiC   | 468              | BLUE          | WATER CLEAR     | 50                         | 3.2    | 3.6 | 5000     | 15                                | 5BWC2.515 |     |
| PM5SGC       | GaP/GaP     | 568              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.8 | 60       | 35                                | 5SGC      |     |
| PM5SGD       | GaP/GaP     | 568              | GREEN         | DIFFUSED        | 30                         | 2.1    | 2.8 | 50       | 40                                | 5SGD      |     |
| PM5SGT       | GaP/GaP     | 568              | GREEN         | TINTED          | 30                         | 2.1    | 2.8 | 60       | 35                                | 5SGT      |     |
| PM5SYC       | GaAsP/GaP   | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.8 | 600      | 35                                | 5SYC      |     |
| PM5SYD       | GaAsP/GaP   | 590              | YELLOW        | DIFFUSED        | 30                         | 2.0    | 2.8 | 150      | 40                                | 5SYD      |     |
| PM5SYT       | GaAsP/GaP   | 590              | YELLOW        | TINTED          | 30                         | 2.0    | 2.8 | 600      | 35                                | 5SYT      |     |
| PM5SRC       | GaAlAs/GaAs | 645              | SUPER RED     | WATER CLEAR     | 30                         | 1.7    | 2.4 | 60       | 35                                | 5SRC      |     |
| PM5SRD       | GaAlAs/GaAs | 645              | SUPER RED     | DIFFUSED        | 30                         | 1.7    | 2.4 | 40       | 40                                | 5SRD      |     |
| PM5SRT       | GaAlAs/GaAs | 645              | SUPER RED     | TINTED          | 30                         | 1.7    | 2.4 | 60       | 35                                | 5SRT      |     |
| PM5UGC       | AlGaInP     | 570              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.4 | 600      | 35                                | 5UGC      |     |
| PMTSUGC      | AlGaInP     | 570              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.4 | 300      | 35                                | 5SUGC     |     |
| PM5UYC       | AlGaInP     | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.4 | 1000     | 30                                | 5UYC      |     |
| PM5SUYC      | AlGaInP     | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.4 | 700      | 35                                | 5SUYC     |     |
| PM5UOC       | AlGaInP     | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.4 | 500      | 35                                | 5UUYC     |     |
| PM5UOC       | AlGaInP     | 625              | ORANGE        | WATER CLEAR     | 30                         | 1.8    | 2.4 | 1400     | 35                                | 5UOC      |     |
| PM5SUOC      | AlGaInP     | 625              | ORANGE        | WATER CLEAR     | 30                         | 1.8    | 2.4 | 1300     | 35                                | 5SUOC     |     |
| PM5URC       | GaAlAs/GaAs | 645              | RED           | WATER CLEAR     | 30                         | 1.7    | 2.4 | 400      | 30                                | 5URC      |     |
| PM5SURC      | AlGaInP     | 640              | RED           | WATER CLEAR     | 30                         | 1.8    | 2.4 | 500      | 35                                | 5SURC     |     |
| PM5UWC       | InGaN/SiC   | 6500K            | WHITE         | WATER CLEAR     | 100                        | 3.5    | 4.2 | 2700     | 30                                | 5WC2.730  |     |

|   |                          |   |  |
|---|--------------------------|---|--|
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|          |                          |   |  |
| DESIGNED:<br><b>Sonny Dam</b>   | DATE:<br><b>12/20/05</b> | <b>PART NO:</b><br>PM5XX  |  |
| CHECKED:<br><b>T. Yin</b>   | DATE:<br><b>12/20/05</b> | <b>REVISION:</b><br>E   |  |
|   |                          | <b>CAGE CODE : 32559    SHEET # 3 OF 4</b>  |  |
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| LED Assy. No. | Peak Wave Length<br>$\lambda_p$ (nm) | Emitted Color | Lens Appearance | Max. Rating | Electro-Optical Data @ 2mA |     |          | Viewing Angle<br>$2\theta_{1/2}$<br>(Deg) | LED P/N |
|---------------|--------------------------------------|---------------|-----------------|-------------|----------------------------|-----|----------|---|---------|
|               |                                      |               |                 | If (mA)     | Vf (V)                     |     | Iv (mcd) |   |         |
|               |                                      |               |                 | MAX         | TYP                        | MAX | TYP      |   |         |
| PM5BWDL       | 430                                  | BLUE          | DIFFUSED        | 7           | 3.8                        | 4.2 | 4        | 45  | 5BWDL   |
| PM5PGDL       | 555                                  | PURE GREEN    | DIFFUSED        | 7           | 2.1                        | 2.6 | 1        | 45  | 5PGDL   |
| PM5GDL        | 568                                  | GREEN         | DIFFUSED        | 7           | 2.1                        | 2.6 | 5        | 45  | 5GDL    |
| PM5YDL        | 590                                  | YELLOW        | DIFFUSED        | 7           | 2.0                        | 2.6 | 4        | 45  | 5YDL    |
| PM5ADL        | 605                                  | AMBER         | DIFFUSED        | 7           | 2.0                        | 2.6 | 4        | 45  | 5ADL    |
| PM5HDL        | 625                                  | HE RED        | DIFFUSED        | 7           | 2.0                        | 2.6 | 5        | 45  | 5HDL    |
| PM5SRDL       | 645                                  | SUPER RED     | DIFFUSED        | 7           | 1.7                        | 2.3 | 6        | 45  | 5SRDL   |

| LED Assy. No.  | Peak Wave Length<br>$\lambda_p$ (nm) | Emitted Color | Lens Appearance | Electro-Optical Data |        |     |          | Viewing Angle<br>$2\theta_{1/2}$<br>(Deg) | LED P/N |
|----------------|--------------------------------------|---------------|-----------------|----------------------|--------|-----|----------|---|---------|
|                |                                      |               |                 | If (mA)              | Vf (V) |     | Iv (mcd) |   |         |
|                |                                      |               |                 | MAX                  | TYP    | MAX | TYP      |   |         |
| <b>5 Volt</b>  |                                      |               |                 | <b>Data @ 5V</b>     |        |     |          |   |         |
| PM5BWD5V       | BLUE                                 | 430           | DIFFUSED        | -                    | -      | 5   | 15       | 40  | 5BWD5V  |
| PM5GC5V        | GREEN                                | 568           | WATER CLEAR     | -                    | -      | 5   | 40       | 40  | 5GC5V   |
| PM5GD5V        | GREEN                                | 568           | DIFFUSED        | -                    | -      | 5   | 25       | 40  | 5GD5V   |
| PM5GT5V        | GREEN                                | 568           | TINTED          | -                    | -      | 5   | 40       | 40  | 5GT5V   |
| PM5AD5V        | AMBER                                | 605           | DIFFUSED        | -                    | -      | 5   | 25       | 40  | 5AD5V   |
| PM5HD5V        | HE RED                               | 625           | DIFFUSED        | -                    | -      | 5   | 30       | 40  | 5HD5V   |
| PM5RD5V        | RED                                  | 700           | DIFFUSED        | -                    | -      | 5   | 1.5      | 40  | 5RD5V   |
| PM5YD5V        | YELLOW                               | 590           | DIFFUSED        | -                    | -      | 5   | 25       | 40  | 5YD5V   |
| <b>12 Volt</b> |                                      |               |                 | <b>Data @ 12V</b>    |        |     |          |   |         |
| PM5GC12V       | GREEN                                | 568           | WATER CLEAR     | -                    | -      | 12  | 40       | 35  | 5GC12V  |
| PM5GD12V       | GREEN                                | 568           | DIFFUSED        | -                    | -      | 12  | 25       | 40  | 5GD12V  |
| PM5HC12V       | HE RED                               | 625           | WATER CLEAR     | -                    | -      | 12  | 50       | 35  | 5HC12V  |
| PM5HD12V       | HE RED                               | 625           | DIFFUSED        | -                    | -      | 12  | 30       | 40  | 5HD12V  |
| PM5RC12V       | RED                                  | 700           | WATER CLEAR     | -                    | -      | 12  | 2        | 35  | 5RC12V  |
| PM5RD12V       | RED                                  | 700           | DIFFUSED        | -                    | -      | 12  | 1.5      | 40  | 5RD12V  |
| PM5YC12V       | YELLOW                               | 590           | WATER CLEAR     | -                    | -      | 12  | 25       | 35  | 5YC12V  |
| PM5YD12V       | YELLOW                               | 590           | DIFFUSED        | -                    | -      | 12  | 20       | 40  | 5YD12V  |

|   |  |                                  |  |   |
|---|--|----------------------------------|--|---|
| STANDARD TOLERANCE<br>(UNLESS OTHERWISE SPECIFIED)<br>$\pm 10\%$ ALL VALUES |  | ANGULAR<br>$X^\circ \pm 1^\circ$ |  | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |
| DESIGNED:<br><b>Sonny Dam</b>   |  | DATE:<br><b>12/20/05</b>         |  |   |
| CHECKED:<br><b>T. Yin</b>   |  | DATE:<br><b>12/20/05</b>         |  | <b>CAGE CODE :</b> 32559<br><b>SHEET #</b> 4 OF 4<br><small>CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.</small>   |

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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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## JONHON

«JONHON» (основан в 1970 г.)

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Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А