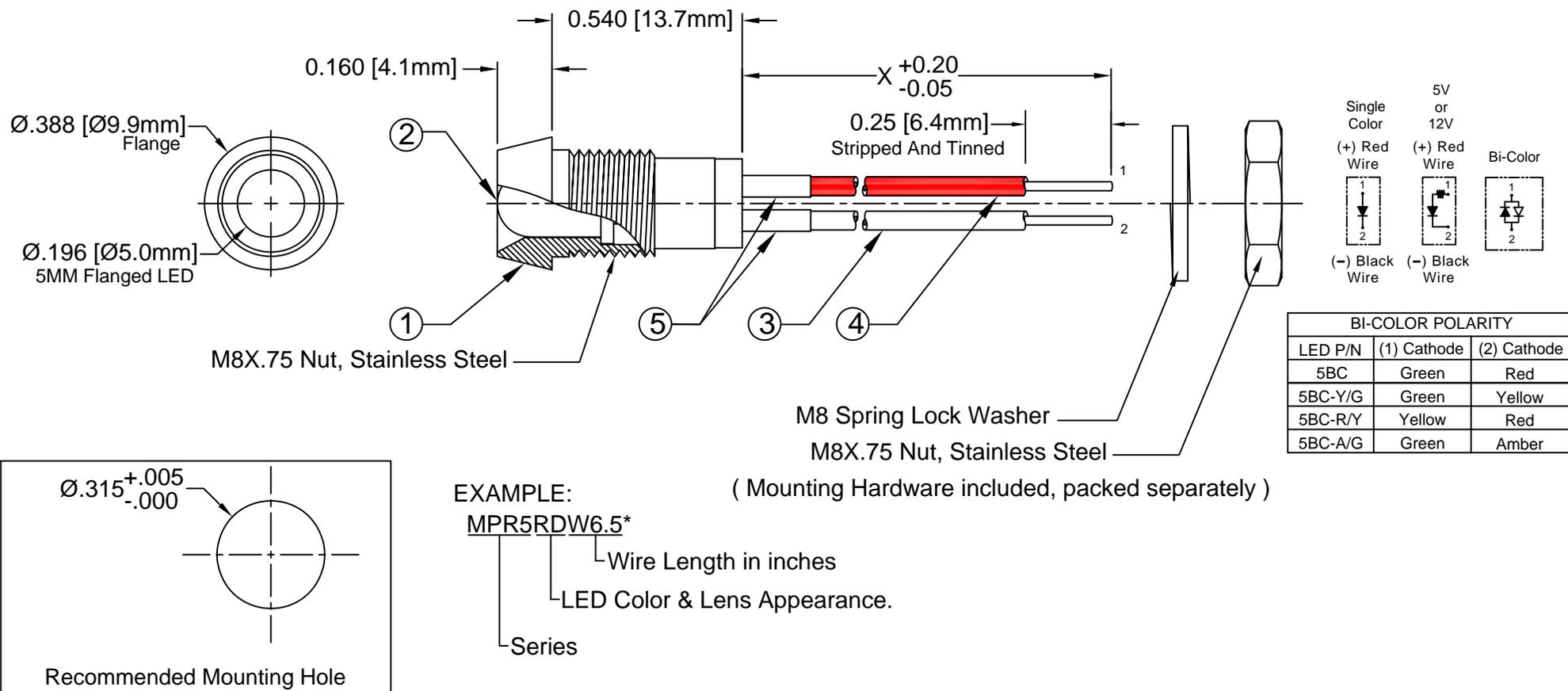


| ITEM | Q'TY | PART NUMBER | PART DESCRIPTION |
|------|------|---------------|--|
| 1 | 1 | MPR5 | Chrome Panel Mount Holder, Recessed, 5mm |
| 2 | 1 | 5XX-F | T-1 3/4 (5mm) Flanged LED, See Page 2 |
| 3 | 1 | BWS24-1007-BK | 24AWG Wire Lead U.L. 1007, Black |
| 4 | 1 | BWS24-1007-RD | 24AWG Wire Lead U.L. 1007, Red |
| 5 | 2 | BST200-BK | Shrink Tubing, Black, .50" Cut Length |

| REV. | DESCRIPTION | DATE | APPROVED |
|------|-------------------------------------|----------|----------|
| A | Engineering Release | 01/31/05 | M. C. |
| B | Added LED 5URC-F & 5URD-F | 04/13/05 | M. C. |
| C | Added LEDs, Page 2 | 01/19/11 | T. Y. |
| D | Updated LED Offerings | 05/07/12 | T. Y. |
| E | Updated LED Optical Characteristics | 09/15/15 | J. C. |
| F | Corrected Dimension | 11/29/16 | J. C. |



ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

| | |
|--|---------------------|
| REVERSE VOLTAGE | 5V |
| REVERSE CURRENT (VR=5V) | 100µA |
| OPERATING TEMPERATURE RANGE | -40°C ~ 85°C |
| STORAGE TEMPERATURE | -40°C ~ 100°C |
| LEAD SOLDERING TEMPERATURE (1/16" FROM BODY) | 260°C for 5 Seconds |

| STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) | | BIVAR® | |
|--|--------------------------|---|--|
| DECIMALS | ANGULAR | 4 THOMAS, IRVINE, CA. 92618 | |
| .X ± .1 | X° ± 1° | TEL: (949) 951-8808 FAX: (949) 951-3974 | |
| .XX ± .02 | | TITLE: STD METAL PANEL MOUNT INDICATORS W/ WIRES | |
| .XXX ± .010 | | PART NO: MPR5XXWX.X | |
| DESIGNED: D. Green | DATE: 01/31/05 | REVISION: F | |
| CHECKED: T. Yin | DATE: 01/31/05 | CAGE CODE : 32559 SHEET # 1 OF 4 | |
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|------|--------------|------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| | SEE SHEET #1 | | |

| LED Assy. No. | Chip | | | Lens Appearance | Electro-Optical Data @ 20mA | | | | Viewing Angle 2 θ ½ (Deg) | LED P/N | |
|----------------|-----------|------------------|---------------|-----------------|-----------------------------|--------|-----|----------|---------------------------------|-----------|-----|
| | Material | Peak Wave Length | Emitted Color | | If (mA) | Vf (V) | | Iv (mcd) | | | |
| | | | | | | MAX | TYP | MAX | | | TYP |
| MPR5BWCWX.X | GaN/SiC | 430 | BLUE | WATER CLEAR | 25 | 4 | 4.5 | 30 | 25 | 5BWC-F | |
| MPR5BWDWX.X | GaN/SiC | 430 | BLUE | DIFFUSED | 25 | 4 | 4.5 | 15 | 40 | 5BWD-F | |
| MPR5BWTWX.X | GaN/SiC | 430 | BLUE | TINTED | 25 | 4 | 4.5 | 30 | 25 | 5BWT-F | |
| MPR5GCWX.X | GaP/GaP | 568 | GREEN | WATER CLEAR | 30 | 2.1 | 2.8 | 40 | 35 | 5GC-F | |
| MPR5GDWX.X | GaP/GaP | 568 | GREEN | DIFFUSED | 30 | 2.1 | 2.8 | 25 | 40 | 5GD-F | |
| MPR5GTWX.X | GaP/GaP | 568 | GREEN | TINTED | 30 | 2.1 | 2.8 | 40 | 35 | 5GT-F | |
| MPR5PGCWX.X | GaP/GaP | 555 | PURE GREEN | WATER CLEAR | 30 | 2.2 | 2.8 | 10 | 35 | 5PGC-F | |
| MPR5PGDWX.X | GaP/GaP | 555 | PURE GREEN | DIFFUSED | 30 | 2.2 | 2.8 | 10 | 40 | 5PGD-F | |
| MPR5PGTWX.X | GaP/GaP | 555 | PURE GREEN | TINTED | 30 | 2.2 | 2.8 | 10 | 35 | 5PGT-F | |
| MPR5YCWX.X | GaAsP/GaP | 590 | YELLOW | WATER CLEAR | 30 | 2 | 2.8 | 40 | 35 | 5YC-F | |
| MPR5YDWX.X | GaAsP/GaP | 590 | YELLOW | DIFFUSED | 30 | 2 | 2.8 | 25 | 40 | 5YD-F | |
| MPR5YTWX.X | GaAsP/GaP | 590 | YELLOW | TINTED | 30 | 2 | 2.8 | 40 | 35 | 5YT-F | |
| MPR5ACWX.X | GaAsP/GaP | 605 | AMBER | WATER CLEAR | 30 | 2 | 2.8 | 40 | 35 | 5AC-F | |
| MPR5ADWX.X | GaAsP/GaP | 605 | AMBER | DIFFUSED | 30 | 2 | 2.8 | 25 | 40 | 5AD-F | |
| MPR5ATWX.X | GaAsP/GaP | 605 | AMBER | TINTED | 30 | 2 | 2.8 | 40 | 35 | 5AT-F | |
| MPR5HCWX.X | GaAsP/GaP | 625 | HE RED | WATER CLEAR | 30 | 2 | 2.8 | 50 | 35 | 5HC-F | |
| MPR5HDWX.X | GaAsP/GaP | 625 | HE RED | DIFFUSED | 30 | 2 | 2.8 | 40 | 40 | 5HD-F | |
| MPR5HTWX.X | GaAsP/GaP | 625 | HE RED | TINTED | 30 | 2 | 2.8 | 50 | 35 | 5HT-F | |
| MPR5RCWX.X | GaP/GaP | 700 | RED | WATER CLEAR | 20 | 2.1 | 2.8 | 2 | 35 | 5RC-F | |
| MPR5RDWX.X | GaP/GaP | 700 | RED | DIFFUSED | 20 | 2.1 | 2.8 | 1.5 | 40 | 5RD-F | |
| MPR5RTWX.X | GaP/GaP | 700 | RED | TINTED | 20 | 2.1 | 2.8 | 2 | 35 | 5RT-F | |
| MPR5BCWX.X-A/G | GaAsP/GaP | 605 | AMBER | DIFFUSED | 30 | 2.0 | 2.8 | 6 | 45 | 5BC-A/G-F | |
| | GaP/GaP | 568 | GREEN | | 30 | 2.1 | 2.8 | 6 | | | |
| MPR5BCWX.X | GaAsP/GaP | 625 | RED | DIFFUSED | 30 | 2.0 | 2.8 | 8 | 45 | 5BC-F | |
| | GaP/GaP | 568 | GREEN | | 30 | 2.1 | 2.8 | 8 | | | |
| MPR5BCWX.X-R/Y | GaAsP/GaP | 625 | RED | DIFFUSED | 30 | 2.0 | 2.8 | 8 | 45 | 5BC-R/Y-F | |
| | GaAsP/GaP | 590 | YELLOW | | 30 | 2.0 | 2.8 | 6 | | | |
| MPR5BCWX.X-Y/G | GaAsP/GaP | 590 | YELLOW | DIFFUSED | 30 | 2.0 | 2.8 | 6 | 45 | 5BC-Y/G-F | |
| | GaP/GaP | 568 | GREEN | | 30 | 2.1 | 2.8 | 8 | | | |

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|  | | | |
| DESIGNED: D. Green | DATE: 01/31/05 | PART NO: MPR5XXWX.X | REVISION: F |
| CHECKED: T. Yin | DATE: 01/31/05 | CAGE CODE : 32559 | SHEET # 2 OF 4 |
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| REV. | DESCRIPTION | DATE | APPROVED |
| | SEE SHEET #1 | | |
| | | | |

| LED Assy. No. | Chip | | | Lens Appearance | Electro-Optical Data @ 20mA | | | | Viewing Angle 2θ ½ (Deg) | LED P/N | |
|---------------|-------------|------------------|---------------|-----------------|-----------------------------|--------|-----|----------|--------------------------------|------------|-----|
| | Material | Peak Wave Length | Emitted Color | | If (mA) | Vf (V) | | Iv (mcd) | | | |
| | | | | | | MAX | TYP | MAX | | | TYP |
| MPR5UBWCWX.X | InGaN/SiC | 468 | BLUE | WATER CLEAR | 50 | 3.2 | 3.6 | 8000 | 15 | 5BWC2.515F | |
| MPR5SGCWX.X | GaP/GaP | 568 | GREEN | WATER CLEAR | 30 | 2.1 | 2.8 | 60 | 35 | 5SGC-F | |
| MPR5SGDWX.X | GaP/GaP | 568 | GREEN | DIFFUSED | 30 | 2.1 | 2.8 | 50 | 40 | 5SGD-F | |
| MPR5SGTDX.X | GaP/GaP | 568 | GREEN | TINTED | 30 | 2.1 | 2.8 | 60 | 35 | 5SGT-F | |
| MPR5SYCWX.X | GaAsP/GaP | 590 | YELLOW | WATER CLEAR | 30 | 2.0 | 2.8 | 600 | 35 | 5SYC-F | |
| MPR5SYDWX.X | GaAsP/GaP | 590 | YELLOW | DIFFUSED | 30 | 2.0 | 2.8 | 150 | 40 | 5SYD-F | |
| MPR5SYTDX.X | GaAsP/GaP | 590 | YELLOW | TINTED | 30 | 2.0 | 2.8 | 600 | 35 | 5SYT-F | |
| MPR5SRCWX.X | GaAlAs/GaAs | 645 | SUPER RED | WATER CLEAR | 30 | 1.7 | 2.4 | 60 | 35 | 5SRC-F | |
| MPR5SRDWX.X | GaAlAs/GaAs | 645 | SUPER RED | DIFFUSED | 30 | 1.7 | 2.4 | 40 | 40 | 5SRD-F | |
| MPR5SRTDX.X | GaAlAs/GaAs | 645 | SUPER RED | TINTED | 30 | 1.7 | 2.4 | 60 | 35 | 5SRT-F | |
| MPR5UGCWX.X | AlGaInP | 570 | GREEN | WATER CLEAR | 30 | 2.1 | 2.4 | 400 | 35 | 5UGC-F | |
| MPR5UGCWX.X | AlGaInP | 570 | GREEN | WATER CLEAR | 30 | 2.1 | 2.4 | 300 | 35 | 5SUGC-F | |
| MPR5UYCWX.X | AlGaInP | 590 | YELLOW | WATER CLEAR | 30 | 2.0 | 2.4 | 1000 | 30 | 5UYC-F | |
| MPR5UYCWX.X | AlGaInP | 590 | YELLOW | WATER CLEAR | 30 | 2.0 | 2.4 | 700 | 35 | 5SUYC-F | |
| MPR5UUYCWX.X | AlGaInP | 590 | YELLOW | WATER CLEAR | 30 | 2.0 | 2.4 | 500 | 35 | 5UUYC-F | |
| MPR5UOCWX.X | AlGaInP | 625 | ORANGE | WATER CLEAR | 30 | 1.8 | 2.4 | 1400 | 35 | 5UOC-F | |
| MPR5UOCWX.X | AlGaInP | 625 | ORANGE | WATER CLEAR | 30 | 1.8 | 2.4 | 1300 | 35 | 5SUOC-F | |
| MPR5URCWX.X | GaAlAs/GaAs | 645 | RED | WATER CLEAR | 30 | 1.7 | 2.4 | 400 | 30 | 5URC-F | |
| MPR5URCWX.X | AlGaInP | 640 | RED | WATER CLEAR | 30 | 1.8 | 2.4 | 500 | 35 | 5SURC-F | |
| MPR5UWCWX.X | InGaN/SiC | 6500K | WHITE | WATER CLEAR | 100 | 3.5 | 4.2 | 2700 | 30 | 5WC2.730F | |

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|  | | | |
| DESIGNED: D. Green | DATE: 01/31/05 | PART NO: MPR5XXWX.X REVISION: F | |
| CHECKED: T. Yin | DATE: 01/31/05 | CAGE CODE : 32559 SHEET # 3 OF 4 <small>CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.</small> | |

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| REV. | DESCRIPTION | DATE | APPROVED |
| | SEE SHEET #1 | | |

| LED Assy. No. | Chip | | | Lens Appearance | Absolute Max. Ratings | | | Electro-Optical Data @ 2mA | | | Viewing Angle 2 θ ½ (Deg) | LED P/N |
|---------------|-----------|-------------------------|---------------|-----------------|-----------------------|---------|-------------|----------------------------|-----|----------|---------------------------|---------|
| | Material | Peak Wave Length λp(nm) | Emitted Color | | Pd (mW) | If (mA) | Peak If(mA) | Vf (V) | | Iv (mcd) | | |
| | | | | | | | | TYP | MAX | TYP | | |
| MPR5BWDLWX.X | GaN/siC | 430 | BLUE | DIFFUSED | 20 | 7 | - | 3.8 | 4.2 | 4.0 | 40 | 5BWDL-F |
| MPR5GDLWX.X | GaP/GaP | 568 | GREEN | DIFFUSED | 10 | 7 | - | 2.1 | 2.6 | 4.0 | 40 | 5GDL-F |
| MPR5PGDLWX.X | GaP/GaP | 555 | PURE GREEN | DIFFUSED | 10 | 7 | - | 2.1 | 2.6 | 1.0 | 40 | 5PGDL-F |
| MPR5YDLWX.X | GaAsP/GaP | 590 | YELLOW | DIFFUSED | 10 | 7 | - | 2.0 | 2.6 | 4.0 | 40 | 5YDL-F |
| MPR5ADLWX.X | GaAsP/GaP | 605 | AMBER | DIFFUSED | 10 | 7 | - | 2.0 | 2.6 | 4.0 | 40 | 5ADL-F |
| MPR5HDLWX.X | GaAsP/GaP | 625 | HE RED | DIFFUSED | 10 | 7 | - | 2.0 | 2.6 | 5.0 | 40 | 5HDL-F |
| MPR5RDLWX.X | GaP/GaP | 700 | RED | DIFFUSED | 10 | 7 | - | 2.1 | 2.6 | 0.5 | 40 | 5RDL-F |

| LED Assy. No. | Peak Wave Length λp(nm) | Emitted Color | Lens Appearance | Electro-Optical Data | | | | Viewing Angle 2 θ½ (Deg) | LED P/N |
|----------------|-------------------------|---------------|-----------------|----------------------|--------|-----|----------|--------------------------|----------|
| | | | | If (mA) | Vf (V) | | Iv (mcd) | | |
| | | | | | MAX | TYP | | | |
| 5 Volt | | | | Data @ 5V | | | | | |
| MPR5BWD5VWX.X | BLUE | 430 | DIFFUSED | - | - | 5 | 15 | 40 | 5BWD5V-F |
| MPR5GC5VWX.X | GREEN | 568 | WATER CLEAR | - | - | 5 | 40 | 40 | 5GC5V-F |
| MPR5GD5VWX.X | GREEN | 568 | DIFFUSED | - | - | 5 | 25 | 40 | 5GD5V-F |
| MPR5GT5VWX.X | GREEN | 568 | TINTED | - | - | 5 | 40 | 40 | 5GT5V-F |
| MPR5AD5VWX.X | AMBER | 605 | DIFFUSED | - | - | 5 | 25 | 40 | 5AD5V-F |
| MPR5HD5VWX.X | HE RED | 625 | DIFFUSED | - | - | 5 | 30 | 40 | 5HD5V-F |
| MPR5RD5VWX.X | RED | 700 | DIFFUSED | - | - | 5 | 1.5 | 40 | 5RD5V-F |
| MPR5YD5VWX.X | YELLOW | 590 | DIFFUSED | - | - | 5 | 25 | 40 | 5YD5V-F |
| 12 Volt | | | | Data @ 12V | | | | | |
| MPR5GC12VWX.X | GREEN | 568 | WATER CLEAR | - | - | 12 | 40 | 35 | 5GC12V-F |
| MPR5GD12VWX.X | GREEN | 568 | DIFFUSED | - | - | 12 | 25 | 40 | 5GD12V-F |
| MPR5HC12VWX.X | HE RED | 625 | WATER CLEAR | - | - | 12 | 50 | 35 | 5HC12V-F |
| MPR5HD12VWX.X | HE RED | 625 | DIFFUSED | - | - | 12 | 30 | 40 | 5HD12V-F |
| MPR5RC12VWX.X | RED | 700 | WATER CLEAR | - | - | 12 | 2 | 35 | 5RC12V-F |
| MPR5RD12VWX.X | RED | 700 | DIFFUSED | - | - | 12 | 1.5 | 40 | 5RD12V-F |
| MPR5YC12VWX.X | YELLOW | 590 | WATER CLEAR | - | - | 12 | 25 | 35 | 5YC12V-F |
| MPR5YD12VWX.X | YELLOW | 590 | DIFFUSED | - | - | 12 | 20 | 40 | 5YD12V-F |

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|  | | | |
| DESIGNED: D. Green | DATE: 01/31/05 | PART NO: MPR5XXWX.X | REVISION: F |
| CHECKED: T. Yin | DATE: 01/31/05 | CAGE CODE : 32559 | SHEET # 4 OF 4 |
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JONHON

«JONHON» (основан в 1970 г.)

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«FORSTAR» (основан в 1998 г.)

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