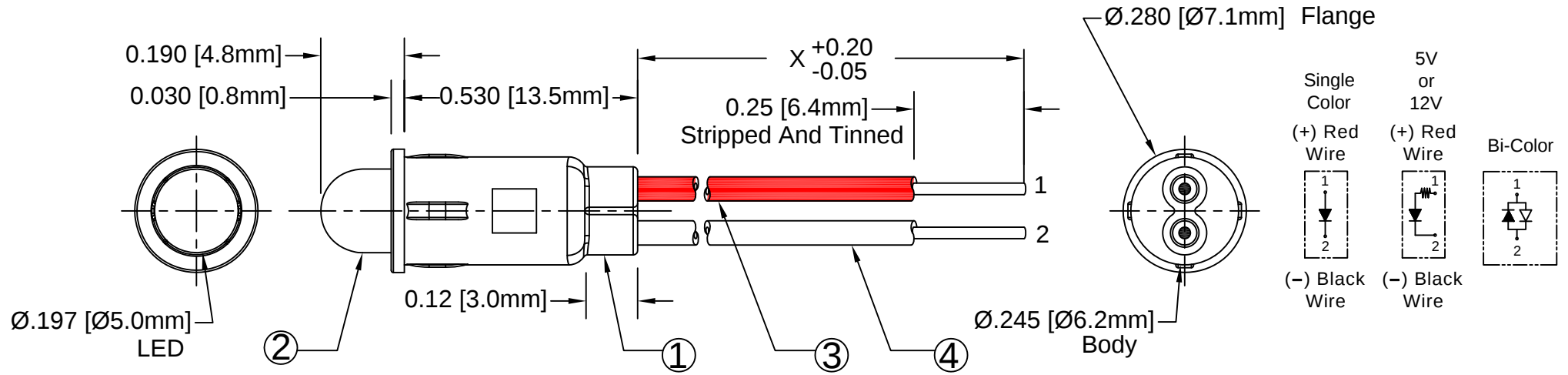


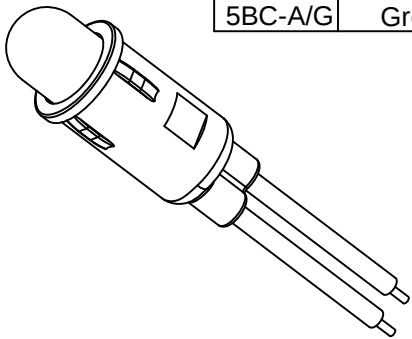
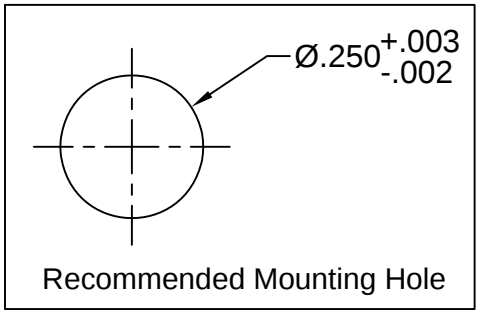
| ITEM | Q'TY | PART NUMBER   | PART DESCRIPTION                                                                                      |
|------|------|---------------|-------------------------------------------------------------------------------------------------------|
| 1    | 1    | PM5-XXX       | LED Holder, Panel Mount, Press Fit, (5mm)<br>PM5 (Standard LED), PM5-5V (5V LED), & PM5-12V (12V LED) |
| 2    | 1    | 5XX           | T1 ¾ (5mm) Non-Flange LED, See Following Pages                                                        |
| 3    | 1    | BWS24-1007-RD | 24AWG Wire Lead U.L. 1007, Red                                                                        |
| 4    | 1    | BWS24-1007-BK | 24AWG Wire Lead U.L. 1007, Black                                                                      |

| REV. | DESCRIPTION                         | DATE     | APPROVED |
|------|-------------------------------------|----------|----------|
| E    | Added 5WC2.520 & 5WC4.030 Specs     | 06/29/09 | T. Y.    |
| F    | Added 5WC7.015 & 5XRC8.515 Specs    | 10/01/09 | T. Y.    |
| G    | Added 5BC-Y/G Specs                 | 02/09/10 | T. Y.    |
| H    | Updated LED Offering                | 05/03/12 | T. Y.    |
| J    | Updated BOM item 1                  | 11/13/12 | T. Y.    |
| K    | Corrected LED P/N Typo in Table     | 04/23/14 | J. C.    |
| L    | 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       |

EXAMPLE:  
**PM5RDW6.5\***  
 Wire Length in inches  
 LED Color & Lens Appearance.  
 Series



## 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°                  | <br><b>TITLE:</b> STD PANEL MOUNT INDICATORS W/ WIRES                       |  |
| .XX ± .02                                          |                          |                                                                             |  |
| .XXX ± .010                                        |                          | <b>PART NO:</b> PM5XXWX.X<br><b>CAGE CODE :</b> 32559 <b>SHEET # 1 OF 4</b> |  |
| DESIGNED:<br><b>David Green</b>                    | DATE:<br><b>10/06/04</b> | <b>REVISION:</b> L<br>CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.       |  |
| CHECKED:<br><b>T. Yin</b>                          | DATE:<br><b>10/06/04</b> |                                                                             |  |

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

| LED Assy.No.  | Chip      |                        |               | Lens<br>Appearance | Electro-Optical Data @20mA |           |     |             | Viewing<br>Angle<br>2 θ 1/2<br>(Deg) | LED P/N |
|---------------|-----------|------------------------|---------------|--------------------|----------------------------|-----------|-----|-------------|--------------------------------------|---------|
|               | Material  | Peak<br>Wave<br>Length | Emitted Color |                    | If<br>(mA)                 | Vf<br>(V) |     | Iv<br>(mcd) |                                      |         |
|               |           |                        |               |                    |                            | MAX       | TYP | MAX         | TYP                                  |         |
| PM5BWCWX.X    | GaN/SiC   | 430                    | BLUE          | WATER CLEAR        | 25                         | 4.0       | 4.5 | 25          | 20                                   | 5BWC    |
| PM5BWDWX.X    | GaN/SiC   | 430                    | BLUE          | DIFFUSED           | 25                         | 4.0       | 4.5 | 15          | 45                                   | 5BWD    |
| PM5BWTWX.X    | GaN/SiC   | 430                    | BLUE          | TINTED             | 25                         | 4.0       | 4.5 | 30          | 20                                   | 5BWT    |
| PM5GCW.X.X    | GaP/GaP   | 568                    | GREEN         | WATER CLEAR        | 30                         | 2.1       | 2.8 | 40          | 35                                   | 5GC     |
| PM5GDWX.X     | GaP/GaP   | 568                    | GREEN         | DIFFUSED           | 30                         | 2.1       | 2.8 | 25          | 45                                   | 5GD     |
| PM5GTWX.X     | GaP/GaP   | 568                    | GREEN         | TINTED             | 30                         | 2.1       | 2.8 | 40          | 35                                   | 5GT     |
| PM5PGCW.X     | GaP/GaP   | 555                    | PURE GREEN    | WATER CLEAR        | 30                         | 2.2       | 2.8 | 10          | 35                                   | 5PGC    |
| PM5PGDWX.X    | GaP/GaP   | 555                    | PURE GREEN    | DIFFUSED           | 30                         | 2.2       | 2.8 | 10          | 45                                   | 5PGD    |
| PM5PGTWX.X    | GaP/GaP   | 555                    | PURE GREEN    | TINTED             | 30                         | 2.2       | 2.8 | 10          | 35                                   | 5PGT    |
| PM5YCW.X.X    | GaAsp/GaP | 590                    | YELLOW        | WATER CLEAR        | 30                         | 2.0       | 2.8 | 40          | 35                                   | 5YC     |
| PM5YDWX.X     | GaAsp/GaP | 590                    | YELLOW        | DIFFUSED           | 30                         | 2.0       | 2.8 | 25          | 45                                   | 5YD     |
| PM5YTWX.X     | GaAsp/GaP | 590                    | YELLOW        | TINTED             | 30                         | 2.0       | 2.8 | 40          | 35                                   | 5YT     |
| PM5ACWX.X     | GaAsp/GaP | 605                    | AMBER         | WATER CLEAR        | 30                         | 2.0       | 2.8 | 40          | 35                                   | 5AC     |
| PM5ADWX.X     | GaAsp/GaP | 605                    | AMBER         | DIFFUSED           | 30                         | 2.0       | 2.8 | 25          | 45                                   | 5AD     |
| PM5ATWX.X     | GaAsp/GaP | 605                    | AMBER         | TINTED             | 30                         | 2.0       | 2.8 | 40          | 35                                   | 5AT     |
| PM5HCWX.X     | GaAsp/GaP | 625                    | HE RED        | WATER CLEAR        | 30                         | 2.0       | 2.8 | 40          | 35                                   | 5HC     |
| PM5HDWX.X     | GaAsp/GaP | 625                    | HE RED        | DIFFUSED           | 30                         | 2.0       | 2.8 | 25          | 45                                   | 5HD     |
| PM5HTWX.X     | GaAsp/GaP | 625                    | HE RED        | TINTED             | 30                         | 2.0       | 2.8 | 40          | 35                                   | 5HT     |
| PM5RCWX.X     | GaP/GaP   | 700                    | RED           | WATER CLEAR        | 20                         | 2.1       | 2.8 | 2           | 35                                   | 5RC     |
| PM5RDWX.X     | GaP/GaP   | 700                    | RED           | DIFFUSED           | 20                         | 2.1       | 2.8 | 2           | 45                                   | 5RD     |
| PM5RTWX.X     | GaP/GaP   | 700                    | RED           | TINTED             | 20                         | 2.1       | 2.8 | 2           | 35                                   | 5RT     |
| PM5BCWX.X-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           |                                      |         |
| PM5BCWX.X     | GaAsp/GaP | 625                    | RED           | WHITE DIFFUSED     | 30                         | 2.0       | 2.8 | 6           | 45                                   | 5BC     |
|               | GaP/GaP   | 568                    | GREEN         |                    | 30                         | 2.1       | 2.8 | 8           |                                      |         |
| PM5BCWX.X-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           |                                      |         |
| PM5BCWX.X-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           |                                      |         |

|                                                                                                             |                          |                                                                                                                                                                 |                       |
|-------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED )<br><u>±10% ALL VALUES</u><br><u>ANGULAR</u><br>X° ± 1° |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808 FAX: (949) 951-3974 |                       |
|                        |                          | TITLE: STD PANEL MOUNT<br>INDICATORS W/ WIRES                                                                                                                   |                       |
| DESIGNED:<br><b>David Green</b>                                                                             | DATE:<br><b>10/06/04</b> | PART NO:<br><b>PM5XXWX.X</b>                                                                                                                                    |                       |
| CHECKED:<br><b>T. Yin</b>                                                                                   | DATE:<br><b>10/06/04</b> | REVISION:<br><b>L</b>                                                                                                                                           |                       |
|                                                                                                             |                          | CAGE CODE # <b>32559</b>                                                                                                                                        | SHEET # <b>2 OF 4</b> |
| CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.                                                             |                          |                                                                                                                                                                 |                       |

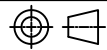
|      |               |      |          |
|------|---------------|------|----------|
| REV. | DESCRIPTION   | DATE | APPROVED |
|      | SEE SHEET #1. |      |          |

| LED Assy.No. | Chip        |                  |               | Lens Appearance | Electro-Optical Data @20mA |        |     |          | Viewing Angle<br>2 θ 1/2 (Deg) | LED P/N   |
|--------------|-------------|------------------|---------------|-----------------|----------------------------|--------|-----|----------|--------------------------------|-----------|
|              | Material    | Peak Wave Length | Emitted Color |                 | If (mA)                    | Vf (V) |     | Iv (mcd) |                                |           |
|              |             |                  |               |                 |                            | MAX    | TYP |          |                                |           |
| PM5UBWCWX.X  | InGaN/SiC   | 468              | BLUE          | WATER CLEAR     | 50                         | 3.2    | 3.6 | 5000     | 15                             | 5BWC2.515 |
| PM5SGCWX.X   | GaP/GaP     | 568              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.8 | 60       | 35                             | 5SGC      |
| PM5SGDWX.X   | GaP/GaP     | 568              | GREEN         | DIFFUSED        | 30                         | 2.1    | 2.8 | 50       | 40                             | 5SGD      |
| PM5SGTWX.X   | GaP/GaP     | 568              | GREEN         | TINTED          | 30                         | 2.1    | 2.8 | 60       | 35                             | 5SGT      |
| PM5SYCWX.X   | GaAsP/GaP   | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.8 | 600      | 35                             | 5SYC      |
| PM5SYDWX.X   | GaAsP/GaP   | 590              | YELLOW        | DIFFUSED        | 30                         | 2.0    | 2.8 | 150      | 40                             | 5SYD      |
| PM5SYTWX.X   | GaAsP/GaP   | 590              | YELLOW        | TINTED          | 30                         | 2.0    | 2.8 | 600      | 35                             | 5SYT      |
| PM5SRCWX.X   | GaAlAs/GaAs | 645              | SUPER RED     | WATER CLEAR     | 30                         | 1.7    | 2.4 | 60       | 35                             | 5SRC      |
| PM5SRDWX.X   | GaAlAs/GaAs | 645              | SUPER RED     | DIFFUSED        | 30                         | 1.7    | 2.4 | 40       | 40                             | 5SRD      |
| PM5SRTWX.X   | GaAlAs/GaAs | 645              | SUPER RED     | TINTED          | 30                         | 1.7    | 2.4 | 60       | 35                             | 5SRT      |
| PM5UGCWX.X   | AlGaInP     | 570              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.4 | 600      | 35                             | 5UGC      |
| PMTSUGCWX.X  | AlGaInP     | 570              | GREEN         | WATER CLEAR     | 30                         | 2.1    | 2.4 | 300      | 35                             | 5SUGC     |
| PM5UYCWX.X   | AlGaInP     | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.4 | 1000     | 30                             | 5UYC      |
| PM5SUYCWX.X  | AlGaInP     | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.4 | 700      | 35                             | 5SUYC     |
| PM5UOCWX.X   | AlGaInP     | 590              | YELLOW        | WATER CLEAR     | 30                         | 2.0    | 2.4 | 500      | 35                             | 5UUYC     |
| PM5UOCWX.X   | AlGaInP     | 625              | ORANGE        | WATER CLEAR     | 30                         | 1.8    | 2.4 | 1400     | 35                             | 5UOC      |
| PM5SUOCWX.X  | AlGaInP     | 625              | ORANGE        | WATER CLEAR     | 30                         | 1.8    | 2.4 | 1300     | 35                             | 5SUOC     |
| PM5URCWX.X   | GaAlAs/GaAs | 645              | RED           | WATER CLEAR     | 30                         | 1.7    | 2.4 | 400      | 30                             | 5URC      |
| PM5SURCWX.X  | AlGaInP     | 640              | RED           | WATER CLEAR     | 30                         | 1.8    | 2.4 | 500      | 35                             | 5SURC     |
| PM5UWCWX.X   | InGaN/SiC   | 6500K            | WHITE         | WATER CLEAR     | 100                        | 3.5    | 4.2 | 2700     | 30                             | 5WC2.730  |

|                                                                                                            |                          |                                                                                                                                                                    |                |
|------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| STANDARD TOLERANCE<br>( UNLESS OTHERWISE SPECIFIED )<br><u>±10% ALL VALUES</u> <u>ANGULAR</u><br>X°   ± 1° |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL: (949) 951-8808    FAX: (949) 951-3974 |                |
|                       |                          | TITLE:      STD PANEL MOUNT<br>INDICATORS W/ WIRES                                                                                                                 |                |
| DESIGNED:<br><b>David Green</b>                                                                            | DATE:<br><b>10/06/04</b> | PART NO:<br>PM5XXWX.X                                                                                                                                              |                |
| CHECKED:<br><b>T. Yin</b>                                                                                  | DATE:<br><b>10/06/04</b> | REVISION:<br>L                                                                                                                                                     |                |
|                                                                                                            |                          | CAGE CODE : 32559                                                                                                                                                  | SHEET # 3 OF 4 |
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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 $\theta$ $\frac{1}{2}$<br>(Deg) | LED P/N |
|---------------|--------------------------------------|---------------|-----------------|-------------|----------------------------|-----|-------------|----------------------------------------------------|---------|
|               |                                      |               |                 | If<br>(mA)  | Vf<br>(V)                  |     | Iv<br>(mcd) |                                                    |         |
|               |                                      |               |                 | MAX         | TYP                        | MAX | TYP         |                                                    |         |
| PM5BWDLWX.X   | 430                                  | BLUE          | DIFFUSED        | 7           | 3.8                        | 4.2 | 4           | 45                                                 | 5BWDL   |
| PM5PGDLWX.X   | 555                                  | PURE GREEN    | DIFFUSED        | 7           | 2.1                        | 2.6 | 1           | 45                                                 | 5PGDL   |
| PM5GDLWX.X    | 568                                  | GREEN         | DIFFUSED        | 7           | 2.1                        | 2.6 | 5           | 45                                                 | 5GDL    |
| PM5YDLWX.X    | 590                                  | YELLOW        | DIFFUSED        | 7           | 2.0                        | 2.6 | 4           | 45                                                 | 5YDL    |
| PM5ADLWX.X    | 605                                  | AMBER         | DIFFUSED        | 7           | 2.0                        | 2.6 | 4           | 45                                                 | 5ADL    |
| PM5HDLWX.X    | 625                                  | HE RED        | DIFFUSED        | 7           | 2.0                        | 2.6 | 5           | 45                                                 | 5HDL    |
| PM5SRDLWX.X   | 645                                  | SUPER RED     | DIFFUSED        | 7           | 1.7                        | 2.3 | 6           | 45                                                 | 5SRDL   |

| LED Assy. No. | Peak Wave Length<br>λp(nm) | Emitted Color | Lens Appearance | Electro-Optical Data |           |     |             | Viewing Angle<br>2 θ½<br>(Deg) | LED P/N |
|---------------|----------------------------|---------------|-----------------|----------------------|-----------|-----|-------------|--------------------------------|---------|
|               |                            |               |                 | If<br>(mA)           | Vf<br>(V) |     | Iv<br>(mcd) |                                |         |
|               |                            |               |                 | MAX                  | TYP       | MAX | TYP         |                                |         |
| 5 Volt        |                            |               |                 | Data @ 5V            |           |     |             |                                |         |
| PM5BWD5VWX.X  | BLUE                       | 430           | DIFFUSED        | -                    | -         | 5   | 15          | 40                             | 5BWD5V  |
| PM5GC5VWX.X   | GREEN                      | 568           | WATER CLEAR     | -                    | -         | 5   | 40          | 40                             | 5GC5V   |
| PM5GD5VWX.X   | GREEN                      | 568           | DIFFUSED        | -                    | -         | 5   | 25          | 40                             | 5GD5V   |
| PM5GT5VWX.X   | GREEN                      | 568           | TINTED          | -                    | -         | 5   | 40          | 40                             | 5GT5V   |
| PM5AD5VWX.X   | AMBER                      | 605           | DIFFUSED        | -                    | -         | 5   | 25          | 40                             | 5AD5V   |
| PM5HD5VWX.X   | HE RED                     | 625           | DIFFUSED        | -                    | -         | 5   | 30          | 40                             | 5HD5V   |
| PM5RD5VWX.X   | RED                        | 700           | DIFFUSED        | -                    | -         | 5   | 1.5         | 40                             | 5RD5V   |
| PM5YD5VWX.X   | YELLOW                     | 590           | DIFFUSED        | -                    | -         | 5   | 25          | 40                             | 5YD5V   |
| 12 Volt       |                            |               |                 | Data @ 12V           |           |     |             |                                |         |
| PM5GC12VWX.X  | GREEN                      | 568           | WATER CLEAR     | -                    | -         | 12  | 40          | 35                             | 5GC12V  |
| PM5GD12VWX.X  | GREEN                      | 568           | DIFFUSED        | -                    | -         | 12  | 25          | 40                             | 5GD12V  |
| PM5HC12VWX.X  | HE RED                     | 625           | WATER CLEAR     | -                    | -         | 12  | 50          | 35                             | 5HC12V  |
| PM5HD12VWX.X  | HE RED                     | 625           | DIFFUSED        | -                    | -         | 12  | 30          | 40                             | 5HD12V  |
| PM5RC12VWX.X  | RED                        | 700           | WATER CLEAR     | -                    | -         | 12  | 2           | 35                             | 5RC12V  |
| PM5RD12VWX.X  | RED                        | 700           | DIFFUSED        | -                    | -         | 12  | 1.5         | 40                             | 5RD12V  |
| PM5YC12VWX.X  | YELLOW                     | 590           | WATER CLEAR     | -                    | -         | 12  | 25          | 35                             | 5YC12V  |
| PM5YD12VWX.X  | YELLOW                     | 590           | DIFFUSED        | -                    | -         | 12  | 20          | 40                             | 5YD12V  |

|                                                                                       |                          |                                                                                                                                                                  |                       |
|---------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| STANDARD TOLERANCE<br>(UNLESS OTHERWISE SPECIFIED)<br>$\pm 10\%$ ALL VALUES           |                          | ANGULAR<br>X° $\pm$ 1°                                                                                                                                           |                       |
|  |                          | <br>4 THOMAS, IRVINE, CA. 92618<br>TEL.: (949) 951-8808 FAX: (949) 951-3974 |                       |
|                                                                                       |                          | TITLE: STD PANEL MOUNT INDICATORS W/ WIRES                                                                                                                       |                       |
| DESIGNED:<br><b>David Green</b>                                                       | DATE:<br><b>10/06/04</b> | PART NO:<br><b>PM5XXWX.X</b>                                                                                                                                     | REVISION:<br><b>L</b> |
| CHECKED:<br><b>T. Yin</b>                                                             | DATE:<br><b>10/06/04</b> | CAGE CODE : <b>32559</b>                                                                                                                                         | SHEET # <b>4 OF 4</b> |
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