

| ELECTRO-OPTICAL CHARACTERISTICS Ta=25°C If=20mA |             |      |      |      |          |           |
|---|-------------|------|------|------|----------|-----------|
| PARAMETER                                       | SYMBOL      | MIN  | TYP  | MAX  | UNITS    | TEST COND |
| FORWARD VOLTAGE                                 | Vf          |      | 3.2  | 3.3  | Vf       |           |
| REVERSE VOLTAGE                                 | Vr          | 5.0  |      |      | Vr       | Ir=100µA  |
| LUMINOUS FLUX*                                  | Iv          | 19   | 19.7 | 20.3 | lm       |           |
| COLOR TEMPERATURE                               |             | 6500 | 6725 | 6950 | K        |           |
| VIEWING ANGLE                                   |             |      | 120  |      | 2x theta |           |
| EMITTED COLOR:                                  | COOL WHITE  |      |      |      |          |           |
| LENS FINISH:                                    | WATER CLEAR |      |      |      |          |           |

\*LUMINOUS FLUX TESTING CONDITION 550nm WAVELENGTH.

| LIMITS OF SAFE OPERATION AT 25°C |            |       |  |
|----------------------------------|------------|-------|--|
| PARAMETER                        | MAX        | UNITS |  |
| PEAK FORWARD CURRENT*            | 100        | mA    |  |
| STEADY CURRENT                   | 80         | mA    |  |
| POWER DISSIPATION                | 315        | mW    |  |
| DERATE FROM 25°C                 | -1.2       | mW/°C |  |
| OPERATING TEMP.                  | -30 TO +85 | °C    |  |
| STORAGE TEMP.                    | -40 TO +85 | °C    |  |

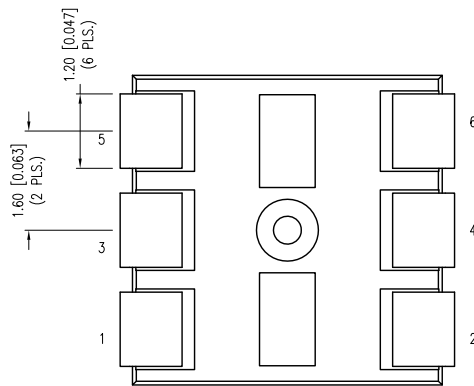
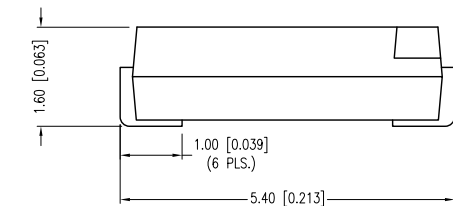
\* t<10µs

| ZENER DIODE             |     |     |     |       |           |
|-------------------------|-----|-----|-----|-------|-----------|
| PARAMETER               | MIN | TYP | MAX | UNITS | TEST COND |
| REVERSE LEAKAGE CURRENT |     |     | 0.5 | µA    | Vr=5V     |
| ZENER VOLTAGE           | 5.8 | 6.3 | 6.8 | V     | Iz=5mA    |
| FORWARD VOLTAGE         |     |     | 1.2 | V     | If=20mA   |

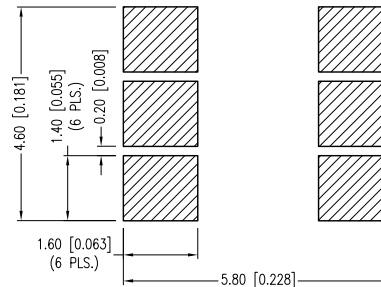
| COLOR      | CIE-X  | CIE-Y  |
|------------|--------|--------|
| COOL WHITE | 0.3288 | 0.3525 |
|            | 0.3153 | 0.3390 |
|            | 0.3167 | 0.3259 |
|            | 0.3290 | 0.3387 |

CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 3 STANDARDS

CAUTION: STATIC SENSITIVE DEVICE  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.



RECOMMENDED SOLDER PAD LAYOUT



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION



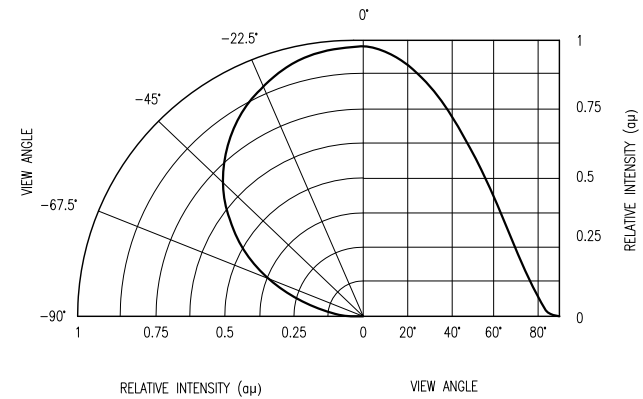
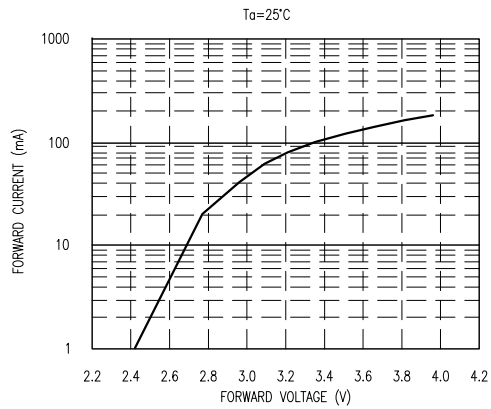
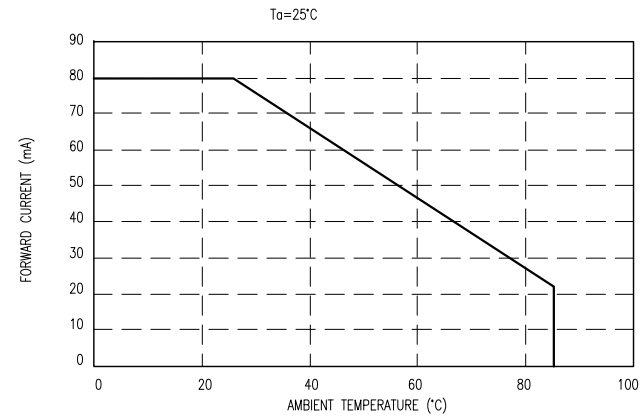
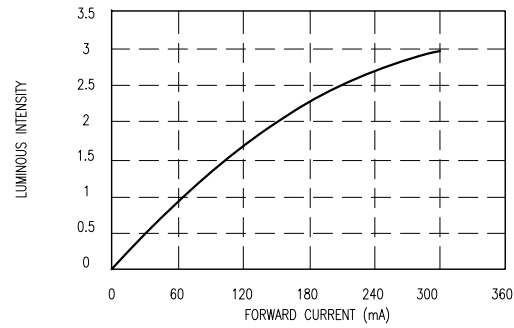
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MEMBER OF ITW PHOTONICS GROUP

5.0x5.0mm SML W/REFLECTOR, WHITE, WATER CLEAR, TAPE & REEL.

\*\*THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.\*\*

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| PAGE:  | 1 OF 3    | CHKD BY:  | DT |
| SCALE: | NTS       | APRVD BY: | DT |
| UNIT:  | mm [INCH] |           | Ⓟ  |



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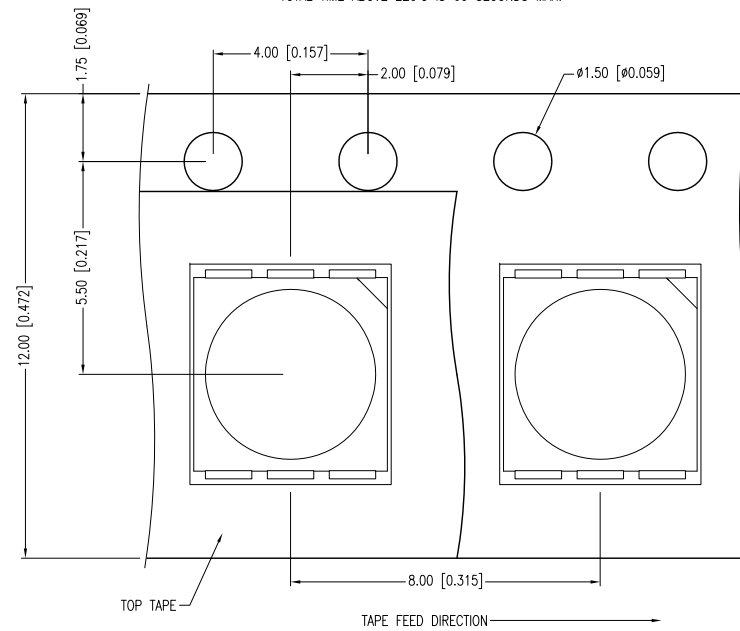
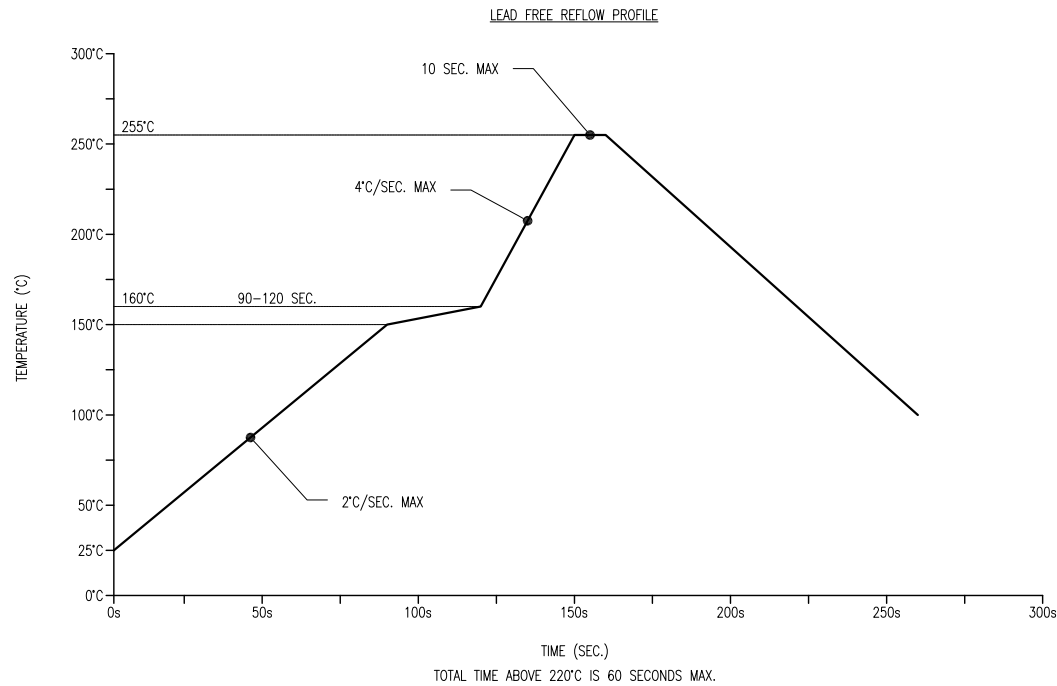
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| PAGE:  | 2 OF 3    | CHKD BY:  | DT   |
| SCALE: | NTS       | APRVD BY: | DT   |
| UNIT:  | mm [INCH] |           | (Pb) |



NOTES:

1. THE POLARITY MARK IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.
2. 1,000 PIECES PER REEL.

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