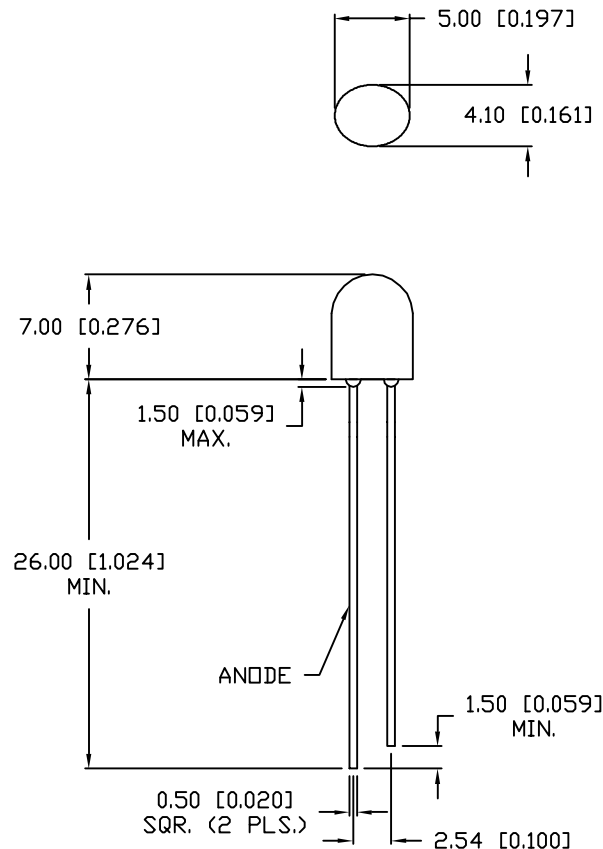




## NOTES:

1. BIN GRADE TO BE INDICATED ON LABEL AS Vf-MCD-nm

## (1) FORWARD VOLTAGE BINS

| BIN | V <sub>f</sub> @20mA |          |
|-----|----------------------|----------|
|     | MIN (V.)             | MAX (V.) |
| 1   | 2.8                  | 2.9      |
| 2   | 2.9                  | 3.0      |
| 3   | 3.0                  | 3.1      |
| 4   | 3.1                  | 3.2      |
| 5   | 3.2                  | 3.3      |
| 6   | 3.3                  | 3.4      |
| 7   | 3.4                  | 3.5      |
| 8   | 3.5                  | 3.6      |

ELECTRO-OPTICAL CHARACTERISTICS T<sub>A</sub>=25°C I<sub>f</sub>=20mA

| PARAMETER           | MIN           | TYP | MAX  | UNITS          | TEST COND             |
|---------------------|---------------|-----|------|----------------|-----------------------|
| PEAK WAVELENGTH (3) |               | 465 |      | nm             |                       |
| FORWARD VOLTAGE (1) | 2.8           |     | 3.6  | V <sub>f</sub> |                       |
| REVERSE VOLTAGE     | 5.0           |     |      | V <sub>r</sub> | I <sub>r</sub> =100μA |
| AXIAL INTENSITY (2) | 1260          |     | 3125 | mcd            | I <sub>f</sub> =20mA  |
| VIEWING ANGLE (X)   |               | 60  |      | 2x theta       |                       |
| VIEWING ANGLE (Y)   |               | 35  |      | 2x theta       |                       |
| EMITTED COLOR:      | BLUE          |     |      |                |                       |
| EPOXY LENS FINISH:  | BLUE DIFFUSED |     |      |                |                       |

## LIMITS OF SAFE OPERATION AT 25°C PER DIE

| PARAMETER             | MAX         | UNITS |
|-----------------------|-------------|-------|
| PEAK FORWARD CURRENT* | 100         | mA    |
| STEADY CURRENT        | 20          | mA    |
| POWER DISSIPATION     | 80          | mW    |
| DERATE FROM 25°C      | -1.2        | mW/°C |
| OPERATING TEMP.       | -30 TO +80  | °C    |
| STORAGE TEMP.         | -40 TO +100 | °C    |
| SOLDERING TEMP.       | +260        | °C    |
| 2.0mm FROM BODY       | 5 SEC. MAX  |       |

\*1/10 DUTY CYCLE, 0.1ms PULSE WIDTH

## (2) AXIAL INTENSITY BINS

| BIN | INTENSITY@20mA |           |
|-----|----------------|-----------|
|     | MIN (mcd)      | MAX (mcd) |
| 1   | 1260           | 1575      |
| 2   | 1575           | 2000      |
| 3   | 2000           | 2500      |
| 4   | 2500           | 3125      |

## (3) DOMINANT WAVE LENGTH BINS

| BIN | WAVELENGTH@20mA |          |
|-----|-----------------|----------|
|     | MIN (nm)        | MAX (nm) |
| A   | 464             | 466      |
| B   | 466             | 468      |
| C   | 468             | 470      |
| D   | 470             | 472      |



\*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 -0.00 MAX.= +0.00 -DECIMAL PRECISION

REV.

PART NUMBER

SLX-LX504E3USBD/1

5.0 x 4.1mm OVAL LED, 465nm BLUE,  
BLUE DIFFUSED LENS.

## CONFIDENTIAL INFORMATION

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## RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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SCALE: N/A