

UNCONTROLLED DOCUMENT

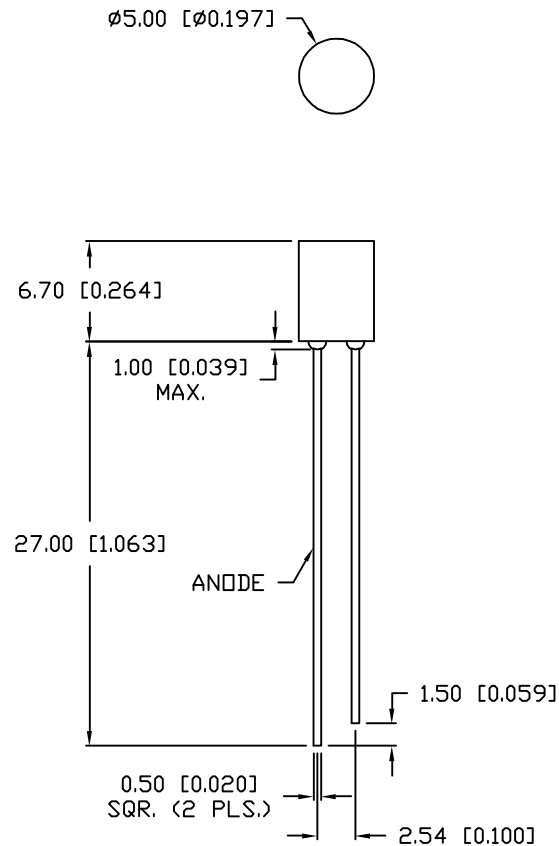
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PART NUMBER

REV.

OED-EL50FT3C110

PRELIMINARY IN P/N DIR

ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^\circ\text{C}$   $I_f=20\text{mA}$ 

| PARAMETER                      | MIN | TYP      | MAX | UNITS   | TEST COND           |
|--------------------------------|-----|----------|-----|---------|---------------------|
| PEAK WAVELENGTH                |     | 940      |     | nm      |                     |
| SPECTRAL BANDWIDTH             |     | 45       |     | nm      |                     |
| FORWARD VOLTAGE                |     | 1.4      | 1.5 | $V_f$   |                     |
| REVERSE VOLTAGE                | 5.0 |          |     | $V_r$   | $I_r=10\mu\text{A}$ |
| RADIANT INTENSITY              | 60  | 120      |     | mW/SR   | $I_f=100\text{mA}$  |
| HALF ANGLE                     |     | $\pm 55$ |     | degrees |                     |
| EPOXY LENS FINISH: WATER CLEAR |     |          |     |         |                     |

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$ 

| PARAMETER                      | MAX         | UNITS                |
|--------------------------------|-------------|----------------------|
| PEAK FORWARD CURRENT*          | 1           | mA                   |
| STEADY CURRENT                 | 100         | mA                   |
| POWER DISSIPATION              | 150         | mW                   |
| DERATE FROM $25^\circ\text{C}$ | -1.2        | mW/ $^\circ\text{C}$ |
| OPERATING TEMP.                | -25 TO +85  | $^\circ\text{C}$     |
| STORAGE TEMP.                  | -25 TO +100 | $^\circ\text{C}$     |
| SOLDERING TEMP.                | +260        | $^\circ\text{C}$     |
| 2.0mm FROM BODY                |             | 3 SEC. MAX           |

\*  $t < 10\mu\text{s}$ 

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

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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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DATE: 9.20.07

PAGE: 1 OF 1

SCALE: N/A

T-5mm, 940nm INFRARED EMITTING DIODE,  
FLAT TOP, WATER CLEAR LENS.



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