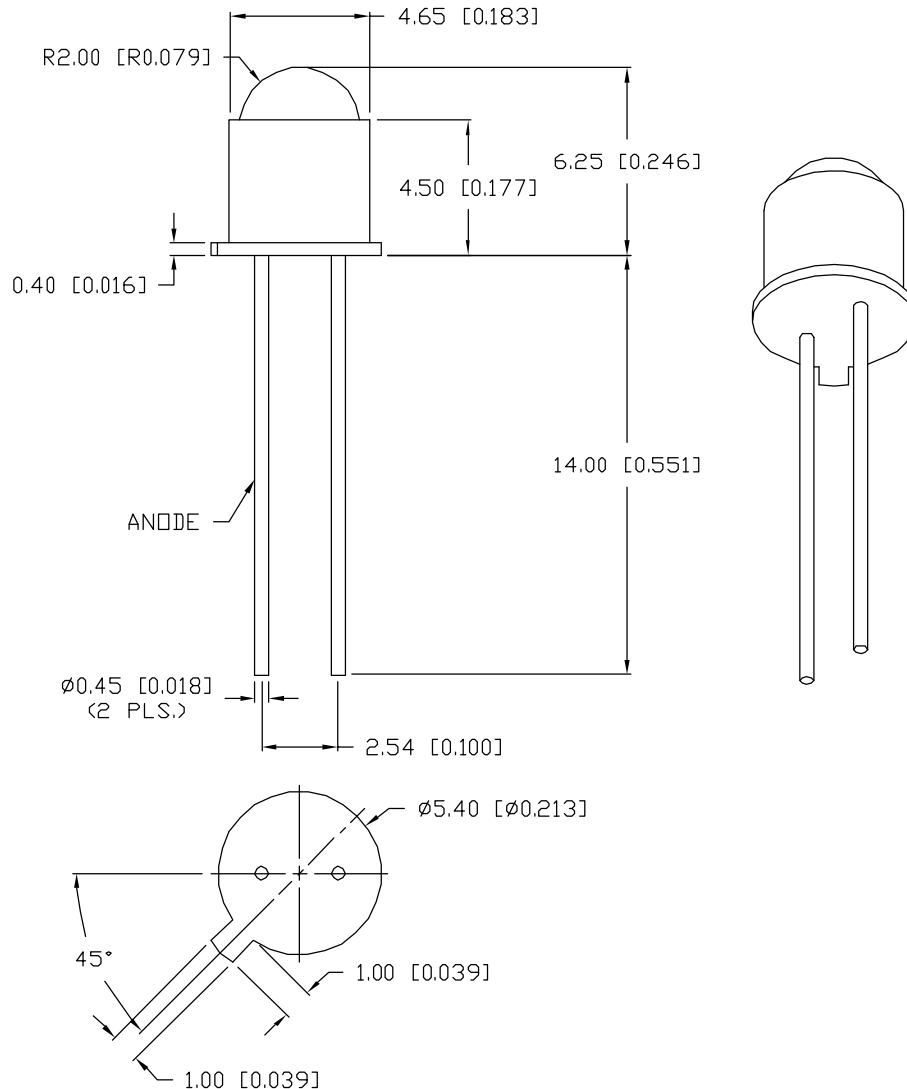


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\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005).

PART NUMBER  
OED-EL-1KL3

REV.  
C

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE     |
|------|-------------------------------------|----------|
| A    | E.C.N. #10BRDR.                     | 1.7.98   |
| B    | E.C.N. #10657.                      | 9.27.00  |
| C    | E.C.N. #10BRDR & REDRAWN IN 3D.     | 12.31.02 |

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             |     | 50   |     | nm      |                     |
| FORWARD VOLTAGE                |     | 1.35 | 1.7 | $V_f$   |                     |
| REVERSE VOLTAGE                | 5.0 |      |     | $V_r$   | $I_r=10\mu\text{A}$ |
| RADIANT INTENSITY              |     | 15   |     | mW/SR   | $I_f=100\text{mA}$  |
| HALF ANGLE                     |     | ± 8  |     | degrees |                     |
| EPOXY LENS FINISH: WATER CLEAR |     |      |     |         |                     |

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

| PARAMETER                      | MAX         | UNITS                |
|--------------------------------|-------------|----------------------|
| PEAK FORWARD CURRENT*          | 1           | A                    |
| STEADY CURRENT                 | 100         | mA                   |
| POWER DISSIPATION              | 200         | mW                   |
| DERATE FROM $25^\circ\text{C}$ | -1.2        | mW/ $^\circ\text{C}$ |
| OPERATING TEMP.                | -40 TO +100 | $^\circ\text{C}$     |
| STORAGE TEMP.                  | -55 TO +125 | $^\circ\text{C}$     |
| SOLDERING TEMP.                | +260        | $^\circ\text{C}$     |
| 2.0mm FROM BODY                |             | 3 SEC. MAX           |

\*  $t_p < ??\mu\text{S}$ ,  $t_p/T = ??$

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LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.=+DECIMAL PRECISION MAX.=+0.00 -DECIMAL PRECISION

REV.  
C

PART NUMBER  
OED-EL-1KL3

TO-18, 940nm INFRARED EMITTING DIODE,  
WATER CLEAR 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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|-----------------|-------------|--------------|--------------|
| DRAWN BY:<br>BC | CHECKED BY: | APPROVED BY: | DATE: 5.5.94 |
|                 |             |              | PAGE: 1 OF 1 |
|                 |             |              | SCALE: N/A   |