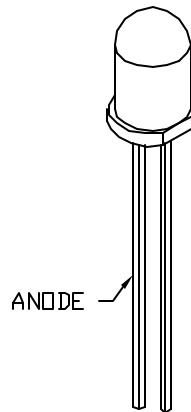
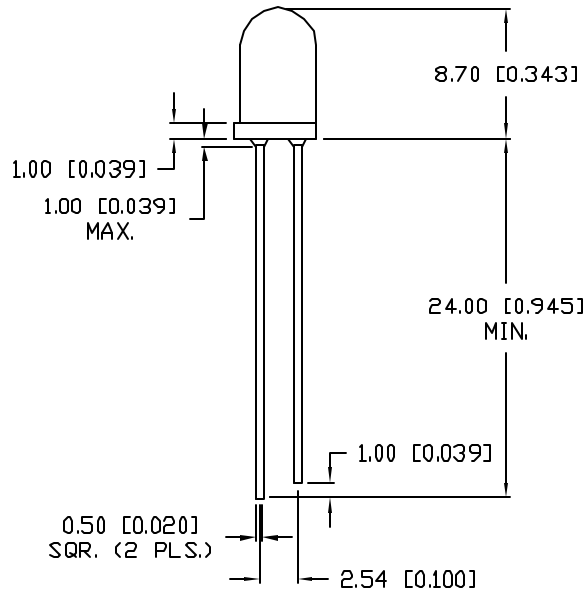
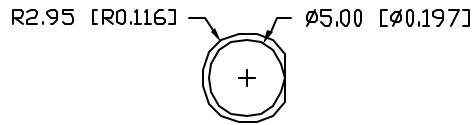


UNCONTROLLED DOCUMENT



PART NUMBER
OED-EL-1L2

REV.
E

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE |
|------|-------------------------------------|----------|
| A | REDRAWN. | 11.24.93 |
| B | CHG'D INTENSITY AND HALF ANGLE. | 2.22.94 |
| C | E.C.N. #10BRDR. | 1.7.98 |
| D | E.C.N. #10BRDR. & REDRAWN IN 3D. | 12.31.02 |
| E | E.C.N. #11393. | 01.18.07 |

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 | | 1.2 | 1.6 | V_f | |
| REVERSE VOLTAGE | 5.0 | | | V_r | $I_r=10\mu\text{A}$ |
| RADIANT INTENSITY | | 60 | | mW/SR | $I_f=100\text{mA}$ |
| HALF ANGLE | | ± 30 | | degrees | |

EPOXY LENS FINISH: WATER CLEAR

LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER | MAX | UNITS |
|--------------------------------|-------------|----------------------|
| PEAK FORWARD CURRENT* | 1 | A |
| STEADY CURRENT | 100 | mA |
| POWER DISSIPATION | 150 | mW |
| DERATE FROM 25°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 |

* $t_p < 10\mu\text{s}$, $t_p/T = 1\%$ DUTY CYCLE



UNCONTROLLED DOCUMENT

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

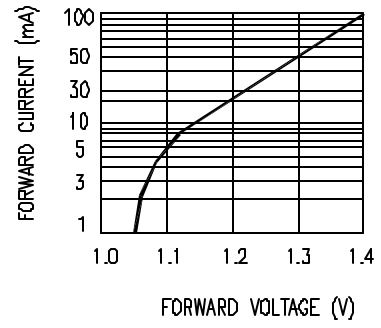
| | |
|--|---------------------------|
| REV. E | PART NUMBER OED-EL-1L2 |
| T-5mm, 940nm INFRARED EMITTING DIODE, WATER CLEAR LENS. | |

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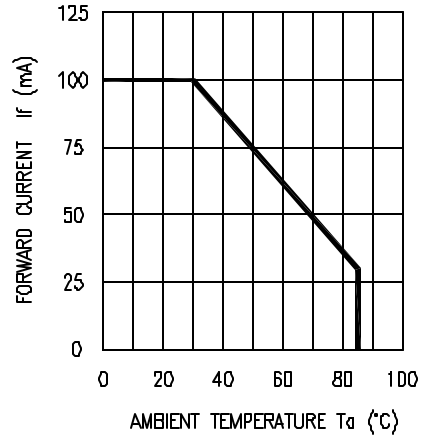
RELIABILITY NOTE
OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

| | | |
|-----------------|-------------|---|
| | | 290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw |
| DRAWN BY: jc | CHECKED BY: | APPROVED BY: |
| DATE: 12.20.90 | | PAGE: 1 OF 1 |
| SCALE: N/A | | |

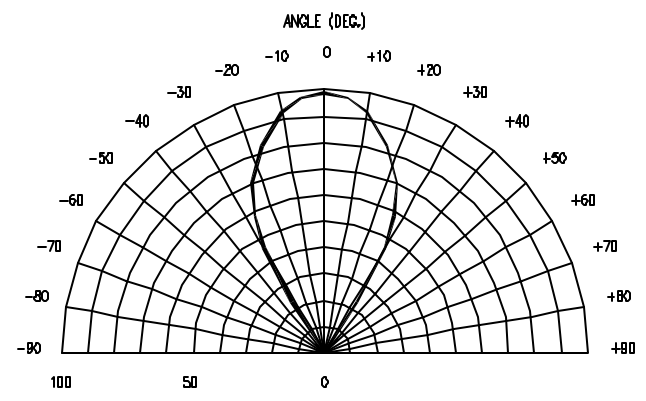
FORWARD CURRENT VS.
FORWARD VOLTAGE



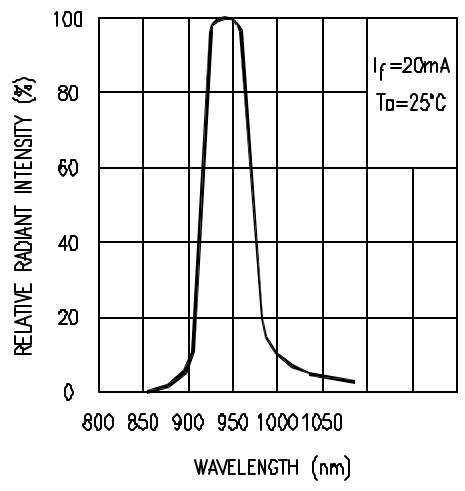
FORWARD CURRENT DERATING CURVE



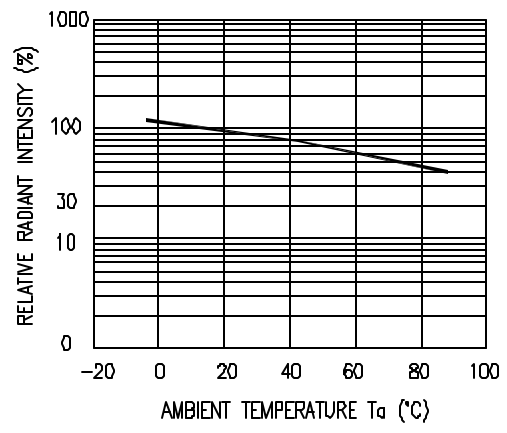
RADIATION DIAGRAM



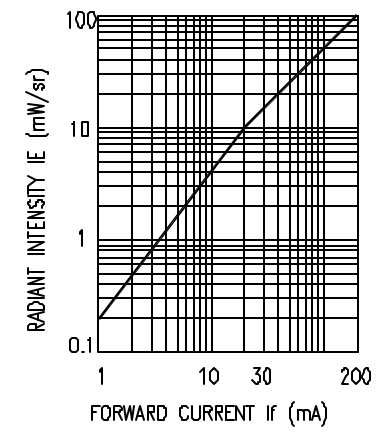
SPECTRAL DISTRIBUTION



RELATIVE RADIANT INTENSITY VS.
AMBIENT TEMPERATURE



RADIANT INTENSITY VS.
FORWARD CURRENT



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| | |
|-----------|---------------------------|
| REV. E | PART NUMBER OED-EL-1L2 |
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CHARTS.

| | | | |
|-----------------|-------------|--------------|--|
| DRAWN BY: jc | CHECKED BY: | APPROVED BY: | DATE: 4.7.04 PAGE: 1 OF 1 SCALE: N/A |
|-----------------|-------------|--------------|--|