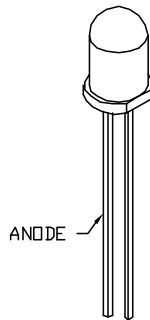
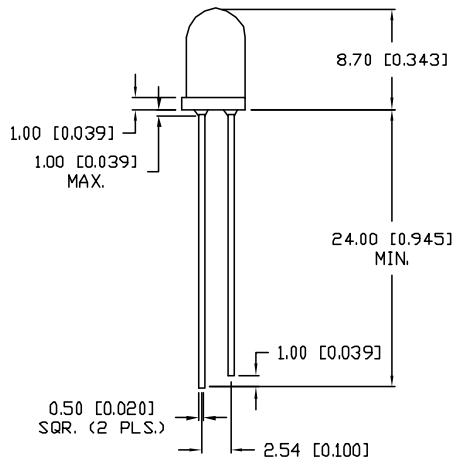
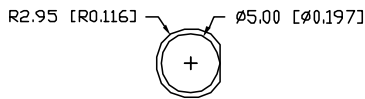


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PART NUMBER
OED-EL-1L2

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



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*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), NN= ± 0.001 DECIMAL PRECISION MAX.= ± 0.00 DECIMAL PRECISION

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

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.

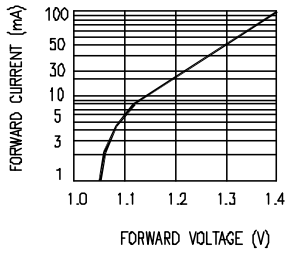
DRAWN BY: JC	CHECKED BY:	APPROVED BY:	DATE: 12.20.90 PAGE: 1 OF 1 SCALE: N/A
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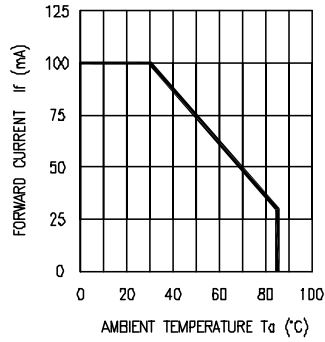
PART NUMBER
OED-EL-1L2

REV.
E

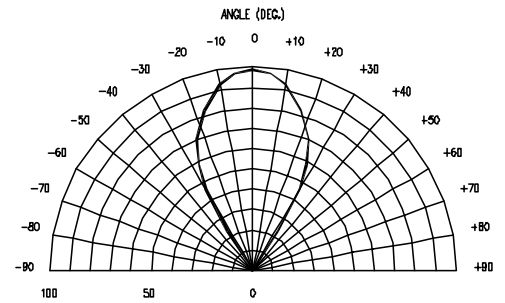
FORWARD CURRENT VS.
FORWARD VOLTAGE



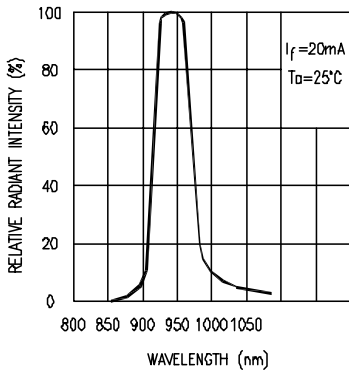
FORWARD CURRENT DERATING CURVE



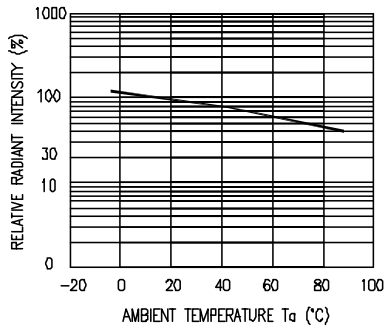
RADIATION DIAGRAM



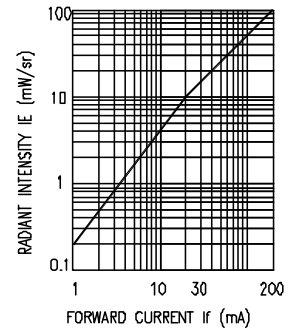
SPECTRAL DISTRIBUTION



RELATIVE RADIANT INTENSITY VS.
AMBIENT TEMPERATURE




RADIANT INTENSITY VS.
FORWARD CURRENT



*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.038), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.006). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), NN=DECIMAL PRECISION MAX.=+0.00 DECIMAL PRECISION

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REV. E	PART NUMBER OED-EL-1L2	<p>CONFIDENTIAL INFORMATION</p> <p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.</p>		<p>290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw</p>		
CHARTS.		<p>RELIABILITY NOTE</p> <p>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.</p>	DRAWN BY: JC	CHECKED BY:	APPROVED BY:	DATE: 4.7.04 PAGE: 1 OF 1 SCALE: N/A