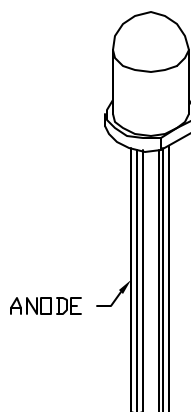
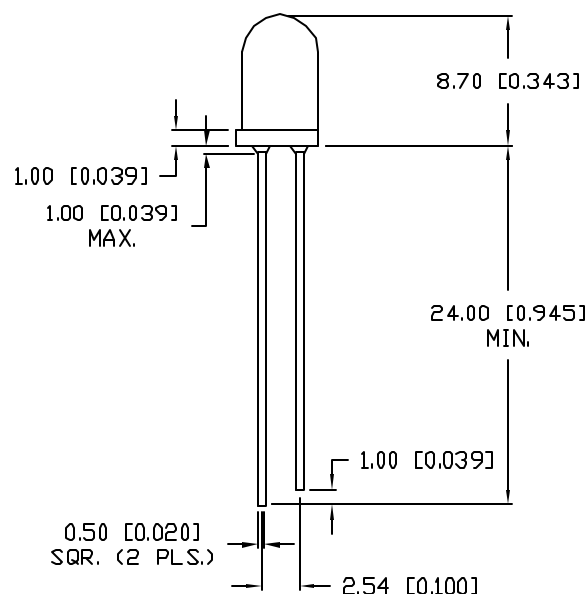


UNCONTROLLED DOCUMENT

R2.95 [R0.116] $\varnothing 5.00 [\varnothing 0.197]$ 

PART NUMBER		REV.
OED-EL-1L2		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

*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.



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JC

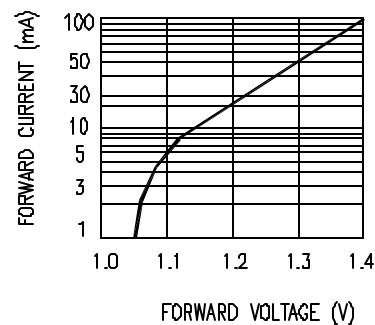
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APPROVED BY:

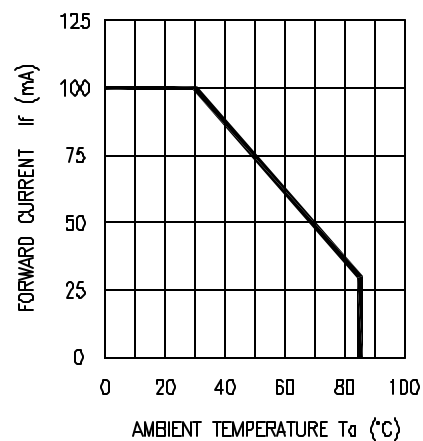
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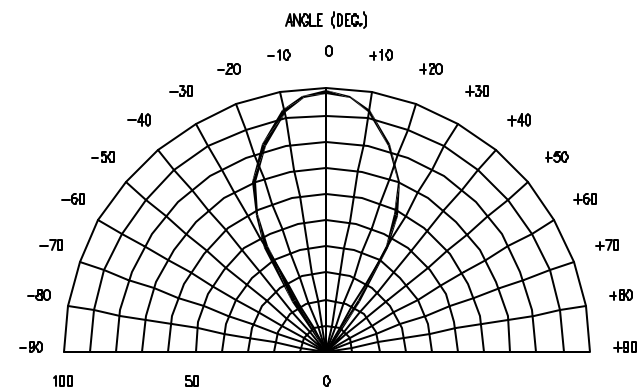
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FORWARD CURRENT VS.
FORWARD VOLTAGE

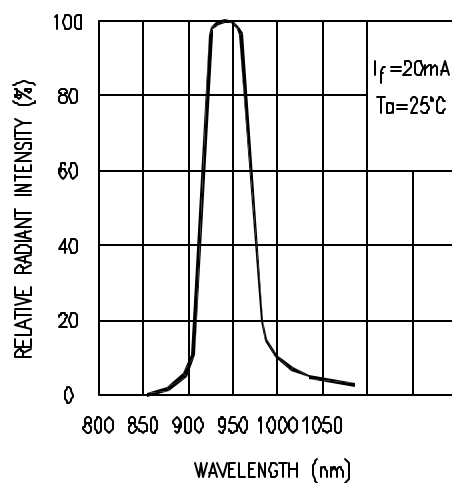
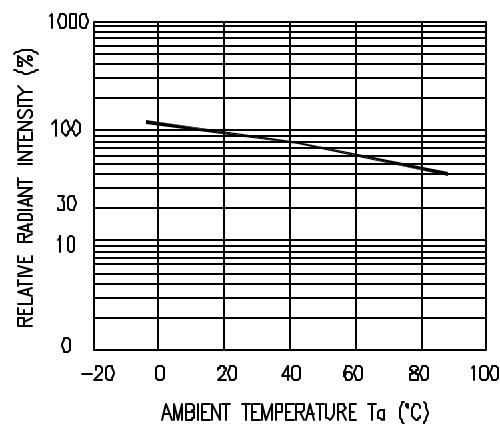
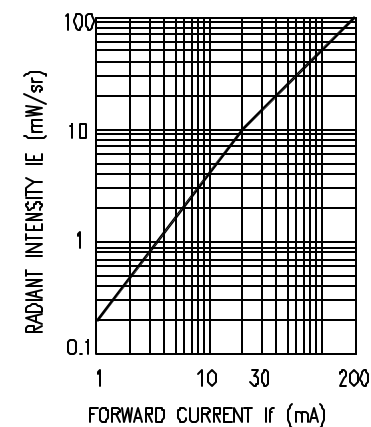
FORWARD CURRENT DERATING CURVE



RADIATION DIAGRAM



SPECTRAL DISTRIBUTION

RELATIVE RADIANT INTENSITY VS.
AMBIENT TEMPERATURERADIANT INTENSITY VS.
FORWARD CURRENT

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REV.
EPART NUMBER
OED-EL-1L2

CHARTS.

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