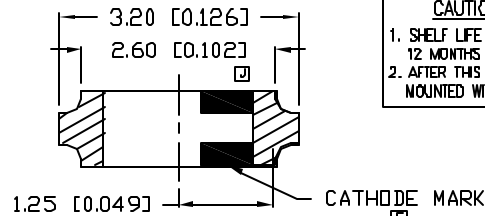
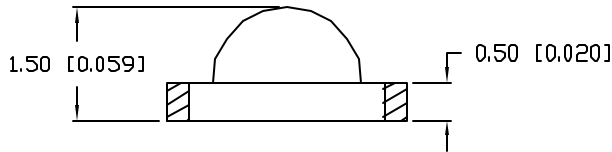
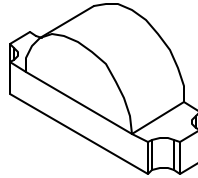


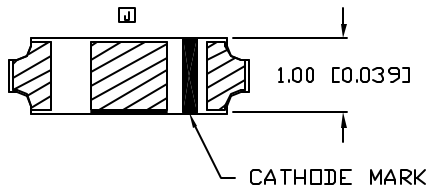
UNCONTROLLED DOCUMENT



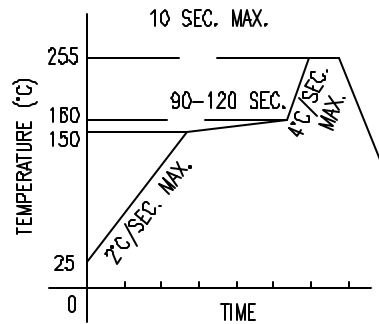
**CAUTION: MOISTURE SENSITIVE DEVICE**  
 1. SHELF LIFE IN SEALED BAG:  
 12 MONTHS AT <40°C AND <80% RELATIVE HUMIDITY (RH).  
 2. AFTER THIS BAG IS OPENED, DEVICES HAVE TO BE  
 MOUNTED WITHIN 48 HOURS OR STORED AT <30% RH.



ANODE  $\rightarrow$   $\leftarrow$  CATHODE

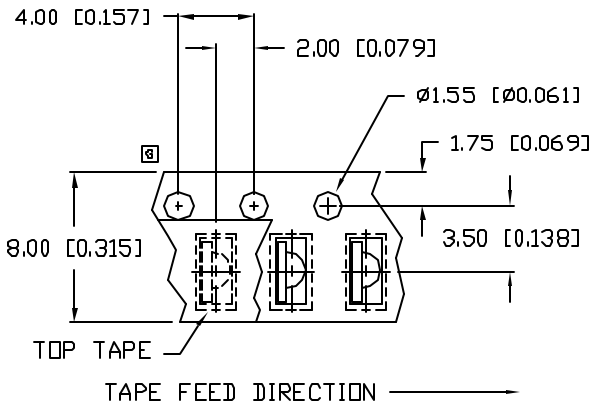
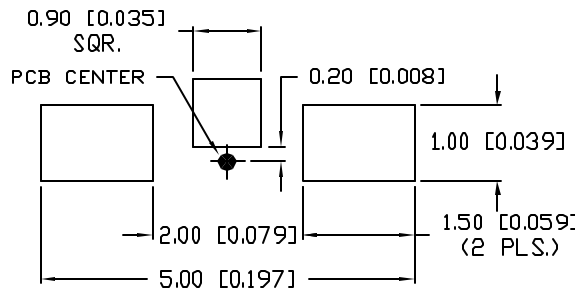


LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



\*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

PART NUMBER  
**SML-LXR85IC-TR**

REV.  
**K**

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10230.	8.23.96
B	E.C.N. #10263.	10.24.96
C	E.C.N. #10338.	5.2.97
D	E.C.N. #10366.	7.22.97
E	E.C.N. #10380.	9.19.97
F	E.C.N. #10BRDR & REDRAWN.	10.15.97
G	E.C.N. #10419.	3.5.98
H	E.C.N. #10471.	10.23.98
I	E.C.N. #10644.	7.18.00
J	E.C.N. #10BRDR. & #10771.	7.30.01
K	E.C.N. #11248.	8.12.05

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		635		nm	
FORWARD VOLTAGE		2.0	2.6	V <sub>f</sub>	
REVERSE VOLTAGE	5.0			V <sub>r</sub>	I <sub>r</sub> =100µA
AXIAL INTENSITY		12		med	I <sub>f</sub> =20mA
VIEWING ANGLE		130		2x theta	
EMITTED COLOR:	RED				
EPOXY LENS FINISH:	WATER CLEAR				

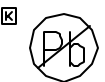
LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
STEADY CURRENT	25	mA
POWER DISSIPATION	65	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-25 TO +85	°C
STORAGE TEMP.	-30 TO +85	°C

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

NOTES:

- 3,000 PIECES PER REEL.
- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.



UNCONTROLLED DOCUMENT

REV. <b>K</b>	PART NUMBER <b>SML-LXR85IC-TR</b>
0.5mm x 3.2mm PCB, RIGHT ANGLE SURFACE MOUNT LED, 635nm RED, WATER CLEAR LENS, 3K PER REEL.	

**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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DATE: 4.24.96		DATE: 4.24.96
PAGE: 1 OF 1		SCALE: N/A