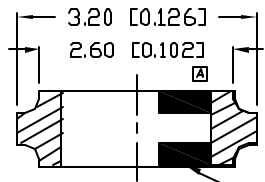


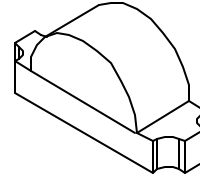
UNCONTROLLED DOCUMENT

PART NUMBER  
SML-LXR85USBC-TR

REV.  
B

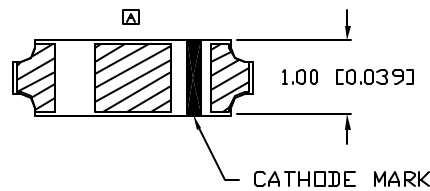
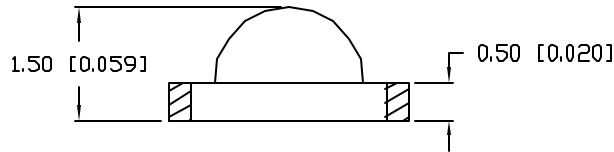


CAUTION: STATIC SENSITIVE DEVICE  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.



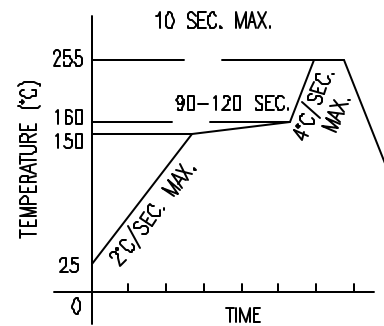
CATHODE MARK

ANODE CATHODE



CATHODE MARK

LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10BRDR. & #10771.	7.30.01
B	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		470		nm	
FORWARD VOLTAGE		3.5	4.0	V <sub>f</sub>	
REVERSE VOLTAGE	5.0			V <sub>r</sub>	I <sub>f</sub> =100μA
AXIAL INTENSITY		30		med	I <sub>f</sub> =20mA
VIEWING ANGLE		160		2x theta	
EMITTED COLOR:	BLUE				
EPOXY LENS FINISH:	WATER CLEAR				

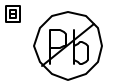
LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
STEADY CURRENT	25	mA
POWER DISSIPATION	80	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-25 TO +85	°C
STORAGE TEMP.	-30 TO +85	°C

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

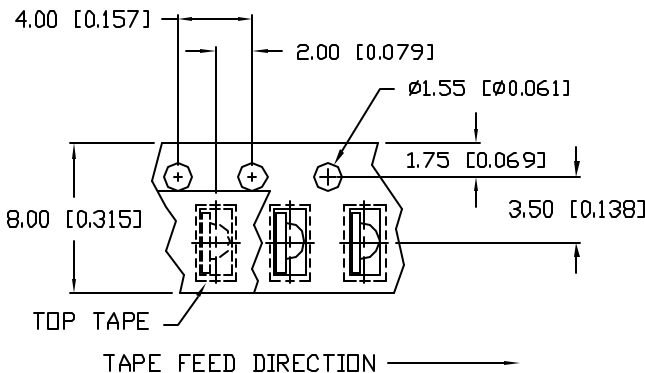
NOTES:

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

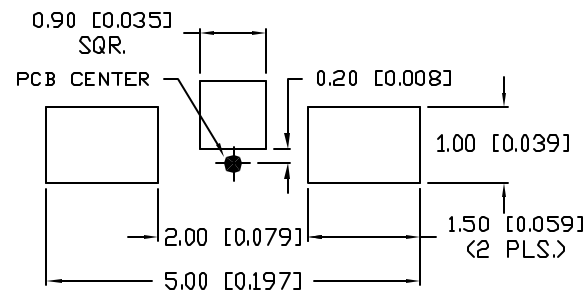


CAUTION: MOISTURE SENSITIVE DEVICE

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



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

UNCONTROLLED DOCUMENT

REV.	PART NUMBER
B	SML-LXR85USBC-TR

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0.5mm x 3.2mm PCB, RIGHT ANGLE SURFACE MOUNT LED,  
470nm BLUE, WATER CLEAR LENS, 3K PER REEL.

**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: CT	CHECKED BY:	APPROVED BY:	DATE: 11.3.00
			PAGE: 1 OF 1
			SCALE: N/A