

UNCONTROLLED DOCUMENT

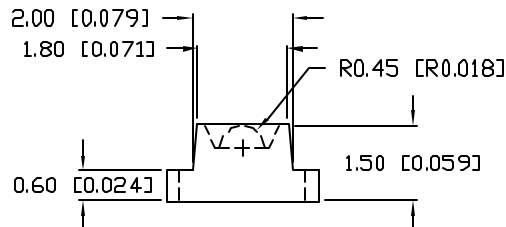
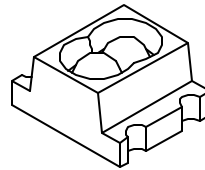
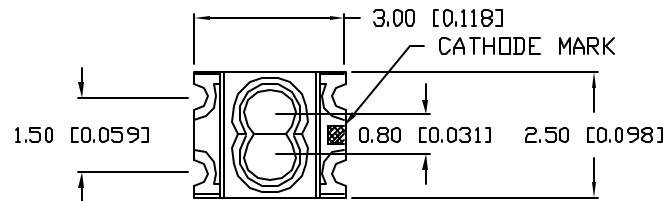
SC.: 15

PART NUMBER

REV.

SML-LXL1210USBSUGC

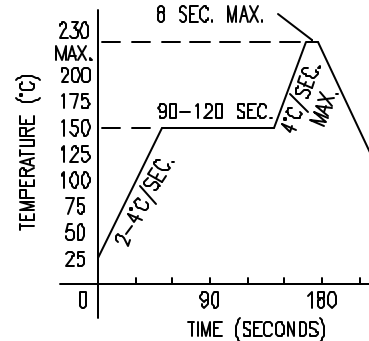
PRELIMINARY IN P/N DIR.



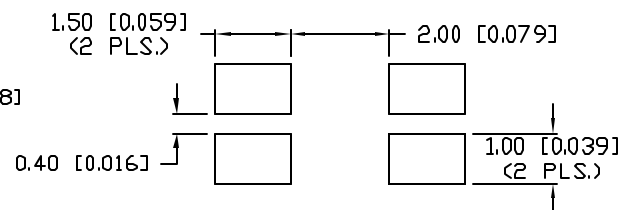
TOP VIEW POLARITY

GREEN ANODE $\circ \rightarrow \triangle \circ$ GREEN CATHODE
 BLUE ANODE $\circ \rightarrow \triangle \circ$ BLUE CATHODE

REFLOW PROFILE



RECOMMENDED SOLDER PAD LAYOUT



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

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		470 (BLUE)		nm	
		574 (GREEN)		nm	
FORWARD VOLTAGE (B/G)		3.5/2.2	4.0/2.6	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_f=100\mu\text{A}$
AXIAL INTENSITY (B/G)		50/30		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		60		2x theta	
EMITTED COLOR:		BLUE/GREEN			
EPOXY LENS FINISH:		WATER CLEAR			

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	COLORS	MAX	UNITS
PEAK FORWARD CURRENT*		160	mA
STEADY CURRENT		30	mA
POWER DISSIPATION		100	mW
DERATE FROM 25°C		-1.0	mW/ $^\circ\text{C}$
OPERATING TEMP.		-40 TO +85	$^\circ\text{C}$
STORAGE TEMP.		-40 TO +90	$^\circ\text{C}$

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

NOTES:

- 2,000 PIECES PER REEL.
- THE POLARITY MARK IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

CAUTION: MOISTURE SENSITIVE DEVICE

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

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*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: $X=\pm 1$ (± 0.038), $XX=\pm 0.5$ (± 0.020), $XXX=\pm 0.25$ (± 0.010), $XXXX=\pm 0.127$ (± 0.005). LEAD SIZE= ± 0.05 (± 0.002), LEAD LENGTH= ± 0.75 (± 0.030), MIN= ± 0.00 (± 0.00), MAX= ± 0.00 (± 0.00).

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SML-LXL1210USBSUGC

2.7mm x 3.0mm PCB, SURFACE MOUNT LED,
 InGaN BLUE/AlInGaP GREEN CHIPS,
 WATER CLEAR LENS, TAPE AND 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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SCALE: N/A