

UNCONTROLLED DOCUMENT

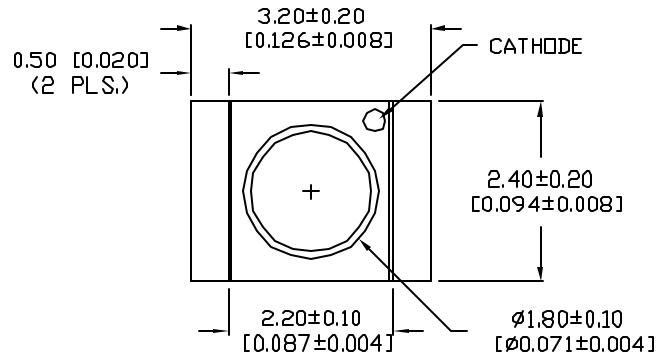
SC:0.10

PART NUMBER

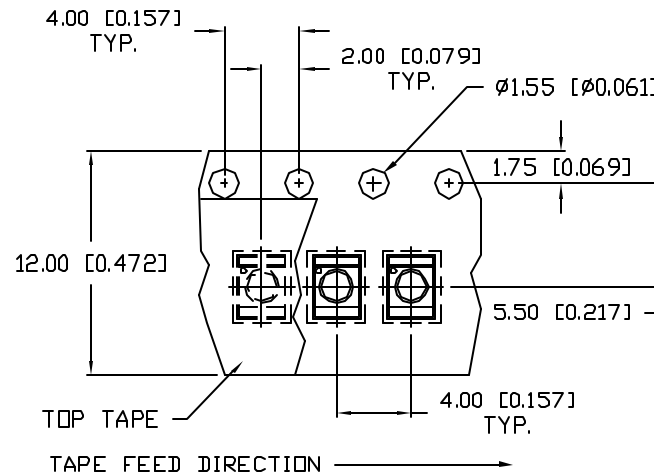
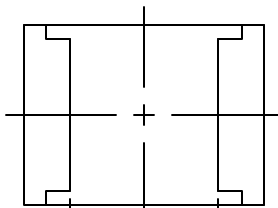
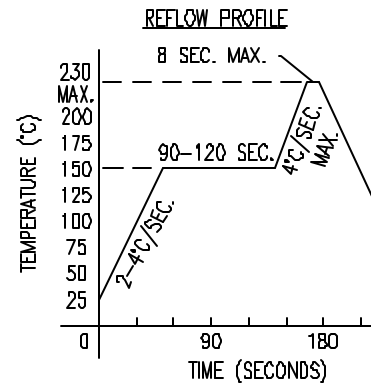
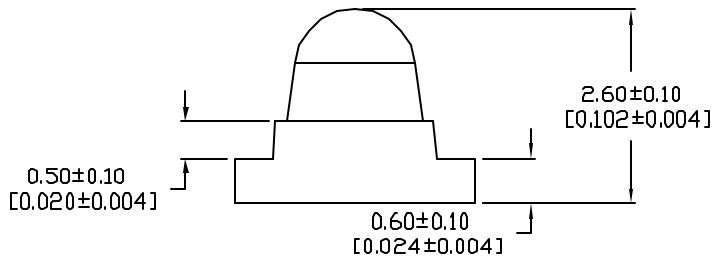
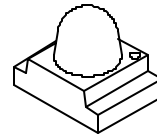
REV.

SML-LXL1209USBC-TR

PRELIMINARY IN P/N DIR



TOP VIEW POLARITY
ANODE CATHODE



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

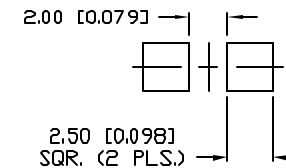
PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		470		nm	
FORWARD VOLTAGE		3.5	4.0	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_f=100\mu\text{A}$
AXIAL INTENSITY		250		mcad	$I_f=20\text{mA}$
VIEWING ANGLE		50		2x theta	
EMITTED COLOR:	ULTRA SUPER BLUE				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	98	mW
DERATE FROM 25°C	-2.0	mW/°C
OPERATING TEMP.	-30 TO +85	°C
STORAGE TEMP.	-40 TO +85	°C

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

RECOMMENDED SOLDER PAD LAYOUT



NOTES: 2.00 [0.079]

- 1,000 PIECES PER REEL.
- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE FOR ALL COLORS. SUPER RED DEVICES ARE INSERTED 180° FROM AS SHOWN.

CAUTION: MOISTURE SENSITIVE DEVICE

1. SHELF LIFE IN SEALED BAG: 12 MONTHS AT <40°C AND <90% RELATIVE HUMIDITY (RH).
2. AFTER THIS BAG IS OPENED, DEVICES HAVE TO BE MOUNTED WITHIN 48 HOURS OR STORED AT <30% RH.

*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= ^{+0.00} -0.00 DECIMAL PRECISION MAX.= ^{+0.00} -0.00 DECIMAL PRECISION

UNCONTROLLED DOCUMENT

REV.

PART NUMBER

SML-LXL1209USBC-TR

CONFIDENTIAL INFORMATION

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.

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.



290 E. HELLEN ROAD
PALATINE, ILLINOIS 60067
PHONE: (847) 359-2790
WEB: <http://www.lumex.com>

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE: 6-21-00

PAGE: 1 OF 1

SCALE: N/A

3.2mm x 2.4mm SURFACE MOUNT LED,
470nm ULTRA SUPER BLUE,
WATER CLEAR LENS, TAPE AND REEL

BC