



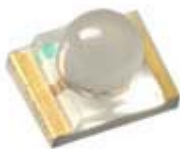
We Tame Photons to Work for You!



Products > LEDs > Surface Mount > 1206 Package > Flat Solder Terminals > Dome Lens

Features / Options

Applications / Uses

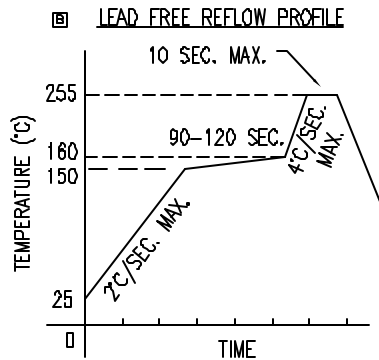
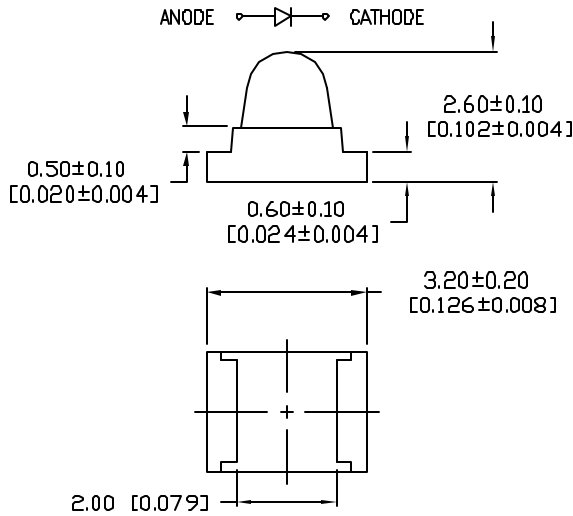
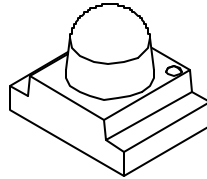
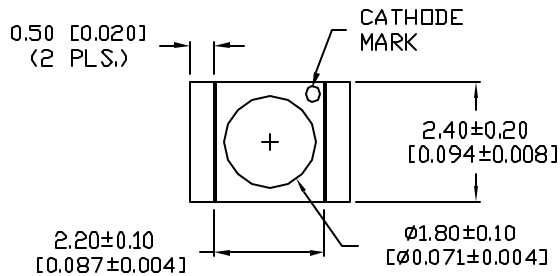


- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

Part Number:	Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
SML-LXL1209SIC-TR	HIGH	AlInGaP	Red	636	Clear	2.0	600	50		—
SML-LXL1209SIC/G-TR	HIGH	AlInGaP	Red	636	Clear	2.0	2500	30		—
SML-LXL1209SOC-TR	HIGH	AlInGaP	Orange	610	Clear	2.45	1500	50		—
SML-LXL1209SRC-TR	STANDARD	GaAlAs	Red	660	Clear	1.85	480	50		—
SML-LXL1209SUGC-TR	HIGH	AlInGaP	Green	574	Clear	2.2	171	30		—
SML-LXL1209SYC-TR	HIGH	AlInGaP	Yellow	590	Clear	2.0	400	50		—
SML-LXL1209UPGC-TR	HIGH	InGaN	Green	525	Clear	3.5	1000	30		—
SML-LXL1209USBC-TR	HIGH	InGaN	Blue	470	Clear	3.5	250	50		—

UNCONTROLLED DOCUMENT



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

PART NUMBER		REV.
SML-LXL1209SUGC-TR		B
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10967.	3.14.03
B	E.C.N. #11148.	12.03.04

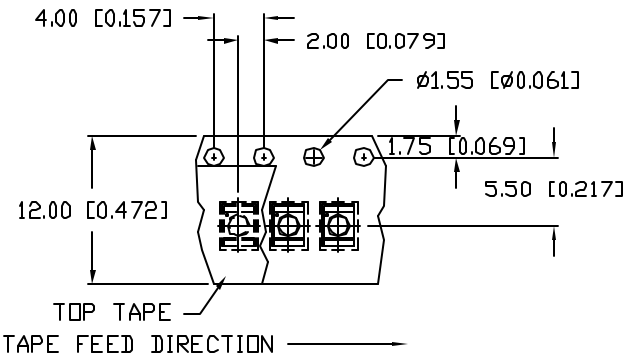
ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ $I_f=20\text{mA}$

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		574		nm	
FORWARD VOLTAGE		2.2	2.8	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_f=100\mu\text{A}$
AXIAL INTENSITY		170		mcad	$I_f=20\text{mA}$
VIEWING ANGLE		30		2x theta	
EMITTED COLOR:	GREEN				
EPOXY LENS FINISH:	WATER CLEAR				

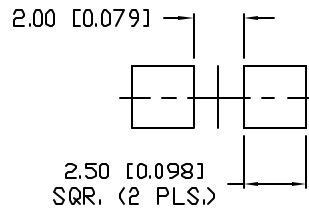
LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	160	mA
STEADY CURRENT	25	mA
POWER DISSIPATION	60	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-30 TO +85	°C
STORAGE TEMP.	-40 TO +85	°C

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



RECOMMENDED SOLDER PAD LAYOUT



NOTES:

- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.



CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS

UNCONTROLLED DOCUMENT

*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 DECREMENTAL PRECISION MAX.=+0.00 DECREMENTAL PRECISION

REV. B	PART NUMBER SML-LXL1209SUGC-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.	
3.2mm x 2.4mm SURFACE MOUNT LED, 574nm SUPER ULTRA GREEN LED, WATER CLEAR LENS, TAPE AND REEL		<p>RELIABILITY NOTE</p> <p>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.</p>	
		DRAWN BY: GT	CHECKED BY:
		APPROVED BY:	DATE: 10.11.01 PAGE: 1 OF 1 SCALE: N/A