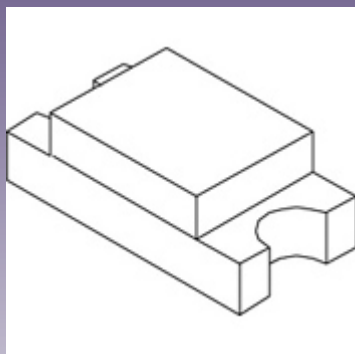




We Tame Photons to Work for You!



Products > LEDs > Surface Mount > 1206 Package > Half Moon Solder Terminals > Standard



### Features / Options

- ▶ 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

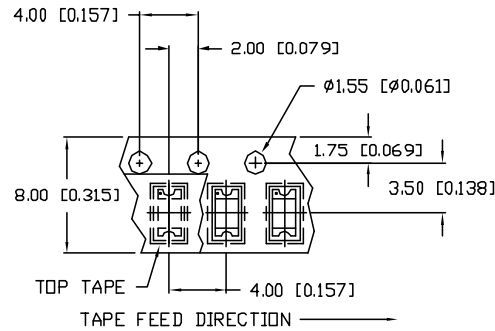
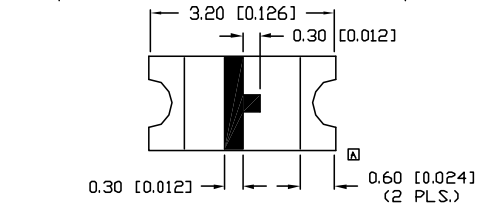
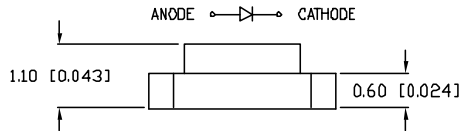
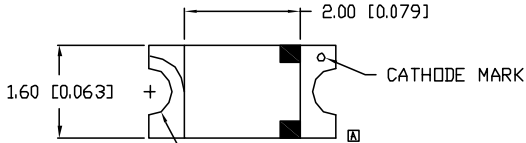
### Applications / Uses

- ▶ 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-LX1206AC-TR	HIGH	AlInGaP	Amber	610	Clear	2.0	6	160		—
SML-LX1206AW-TR	HIGH	AlInGaP	Amber	610	White Diffused	2.0	6	160		—
SML-LX1206GC-TR	STANDARD	GaP	Green	565	Clear	2.1	10	160		—
SML-LX1206GC-TR1	STANDARD	GaP	Green	565	Clear	2.2	10	160		—
SML-LX1206GW-TR	STANDARD	GaP	Green	565	White Diffused	2.2	10	160		—
SML-LX1206IC-TR	STANDARD	GaAsP	Red	635	Clear	2	6	160		—
SML-LX1206IW-TR	STANDARD	GaAsP	Red	635	White Diffused	2.0	6	160		—
SML-LX1206PGC-TR	STANDARD	GaP	Green	555	Clear	2.1	6	160		—
SML-LX1206SGC-TR	STANDARD	GaP	Green	565	Clear	2.2	10	160		—
SML-LX1206SGW-TR	STANDARD	GaP	Green	565	White Diffused	2.2	10	160		—

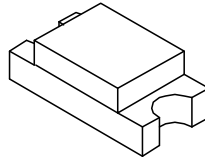
SML-LX1206SIC-TR		HIGH	AlInGaP	Red	636	Clear	2.0	70	140		—
SML-LX1206SOC-TR		HIGH	AlInGaP	Orange	610	Clear	2.0	70	140		—
SML-LX1206SRC-TR		STANDARD	GaAlAs	Red	660	Clear	1.85	100	90		—
SML-LX1206SRW-TR		STANDARD	GaAlAs	Red	660	White Diffused	1.8	15	160		—
SML-LX1206SUGC-TR		HIGH	AlInGaP	Green	574	Clear	2.2	45	140		—
SML-LX1206SYC-TR		HIGH	AlInGaP	Yellow	590	Clear	2.2	70	140		—
SML-LX1206SYW-TR		HIGH	AlInGaP	Yellow	590	White Diffused	2.0	40	160		—
SML-LX1206UPGC-TR		HIGH	InGaN	Green	525	Clear	3.5	45	140		—
SML-LX1206USBC-TR		HIGH	InGaN	Blue	470	Clear	3.5	25	140		—
SML-LX1206UWW-TR		HIGH	InGaN	White	-	Diffused	3.5	90	140		—
SML-LX1206YC-TR		STANDARD	GaAsP	Yellow	585	Clear	2	6	160		—
SML-LX1206YGC-TR		STANDARD	GaAsP	Yellow/Green	585	Clear	2.1/2.2	10	160		—

UNCONTROLLED DOCUMENT

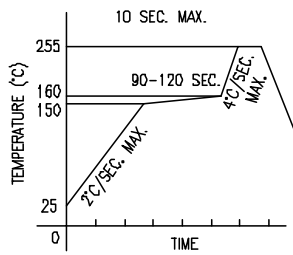


\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.005).

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

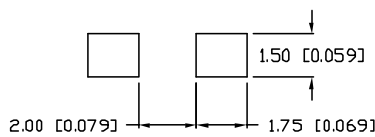


LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



PART NUMBER		REV.
SML-LX1206USBC-TR		C
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10814.	12.3.01
B	E.C.N. #10967.	3.14.03
C	E.C.N. #11148.	1.20.05

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	$V_f$	
REVERSE VOLTAGE	5.0			$V_r$	$I_f=100\mu\text{A}$
AXIAL INTENSITY		25		md	$I_f=20\text{mA}$
VIEWING ANGLE		140		2x theta	
EMITTED COLOR:	BLUE				
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	100	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-30 TO +85	°C
STORAGE TEMP.	-40 TO +85	°C

NOTES:

- THE POLARITY MARK IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.



CAUTION: MOISTURE SENSITIVE DEVICE  
PER JEDEC LEVEL 4 STANDARDS

UNCONTROLLED DOCUMENT

LEAD SIZE=±0.05 (0.002), LEAD LENGTH=±0.75 (±0.030), MIN= ±0.00 DECIMAL PRECISION MAX.= ±0.00 DECIMAL PRECISION

REV.	PART NUMBER
C	SML-LX1206USBC-TR
3.2mm x 1.6mm PCB SURFACE MOUNT LED, 470nm ULTRA SUPER BLUE LED, WATER CLEAR LENS, TAPE AND REEL	

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.



DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
BC			1.8.01
			PAGE: 1 OF 1
			SCALE: N/A