



We Tame Photons to Work for You!



Products > LEDs > Surface Mount > 0805 Package > Half Moon Solder Terminals

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

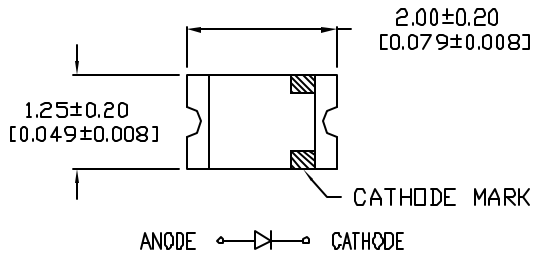
- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

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-LX0805DRC-TR	HIGH	AllnGaP	Red	660	Clear	2.0	25	140		—
SML-LX0805GC-TR	STANDARD	GaP	Green	565	Clear	2.1	10	140		—
SML-LX0805IC-TR	STANDARD	GaAsP	Red	635	Clear	2	9	140		—
SML-LX0805SIC-TR	HIGH	AllnGaP	Red	636	Clear	2.0	60	140		—
SML-LX0805SOC-TR	HIGH	AllnGaP	Orange	610	Clear	2.0	60	140		—
SML-LX0805SRC-TR	STANDARD	GaAlAs	Red	660	Clear	1.85	25	140		—
SML-LX0805SUGC-TR	HIGH	AllnGaP	Green	574	Clear	2.2	45	140		—
SML-LX0805SYC-TR	HIGH	AllnGaP	Yellow	590	Clear	2.0	60	140		—
SML-LX0805UPGC-TR	HIGH	InGaN	Green	525	Clear	3.5	45	140		—
SML-LX0805USBC-TR	HIGH	InGaN	Blue	470	Clear	3.5	25	140		—

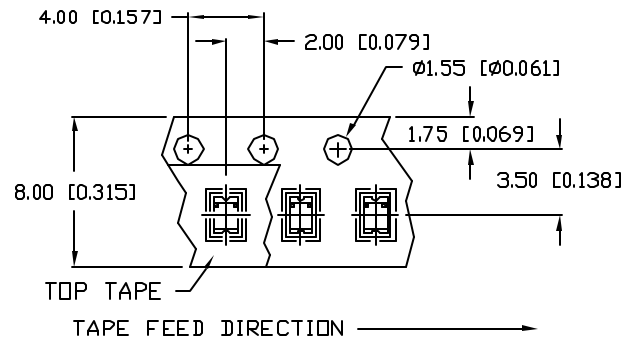
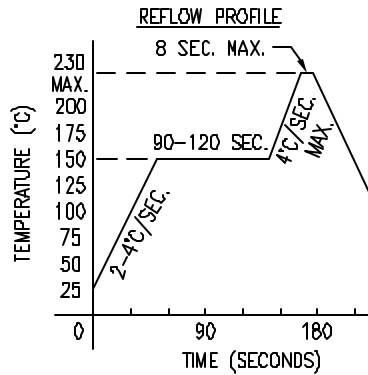
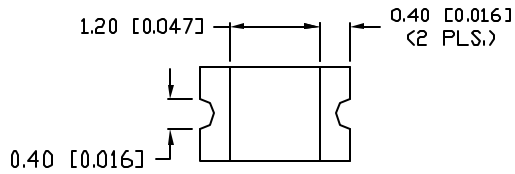
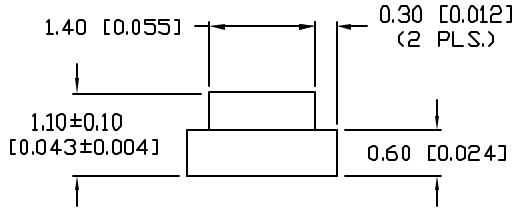
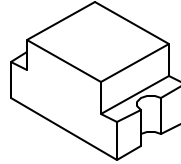
SML-LX0805UWC-TR		HIGH	InGaN	White	-	Clear	3.5	150	140		—
SML-LX0805YC-TR		STANDARD	GaAsP	Yellow	585	Clear	2.1	9	140		—
SML-LXT0805AW-TR		STANDARD	GaAlAs	Amber	605	White Diffused	2.0	11	140		—
SML-LXT0805GW-TR		STANDARD	GaP	Green	565	White Diffused	2.2	11	140		—
SML-LXT0805IW-TR		STANDARD	GaAlAs	Red	635	White Diffused	2.0	11	140		—
SML-LXT0805SBW-TR		STANDARD	SiC	Blue	430	White Diffused	4.0	11	140		—
SML-LXT0805SRW-TR		STANDARD	GaAlAs	Red	660	White Diffused	1.8	21	140		—
SML-LXT0805SUGW-TR		HIGH	AlInGaP	Green	574	White Diffused	2.2	40	140		—
SML-LXT0805SYW-TR		HIGH	AlInGaP	Yellow	590	White Diffused	2.1	60	140		—
SML-LXT0805UPGW-TR		HIGH	InGaN	Green	525	White Diffused	3.5	130	140		—
SML-LXT0805YW-TR		STANDARD	GaAlAs	Yellow	585	White Diffused	2.1	10	140		—



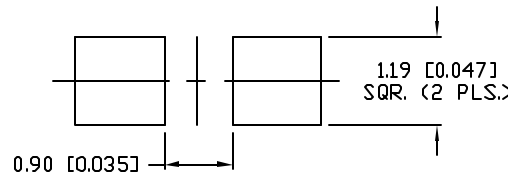
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**CAUTION: STATIC SENSITIVE DEVICE**  
 FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
 WHEN WORKING WITH THIS PART.



**RECOMMENDED SOLDER PAD LAYOUT**



PART NUMBER		REV.
SML-LX0805UWC-TR		B

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10862.	5.9.02
B	E.C.N. #10967.	3.14.03

**ELECTRO-OPTICAL CHARACTERISTICS T<sub>A</sub>=25°C**

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH			550 (WHITE)		nm	
FORWARD VOLTAGE	V <sub>f</sub>		3.5	4.0	V	I <sub>f</sub> =20mA
REVERSE VOLTAGE	V <sub>r</sub>	5			V	I <sub>f</sub> =10µA
AXIAL INTENSITY(*1)	I <sub>v</sub>		150		mcd	I <sub>f</sub> =20mA
CHROMATICITY COORDINATES(*2)	X		0.31			I <sub>f</sub> =20mA
	Y		0.32			I <sub>f</sub> =20mA
VIEWING ANGLE			120		2x theta	
EMITTED COLOR:			WHITE			
EPOXY LENS FINISH:			WATER CLEAR			

\*1. AXIAL INTENSITY TESTING CONDITION: 550nm WAVELENGTH.  
 \*2. THE ICI STANDARD COLORIMETRIC SYSTEM.

**LIMITS OF SAFE OPERATION AT 25°C**

PARAMETER	SYMBOL	MAX	UNITS
PULSE FORWARD CURRENT	I <sub>p</sub>	100*	mA
STEADY CURRENT	I <sub>f</sub>	30	mA
POWER DISSIPATION	P <sub>D</sub>	120	mW
OPERATING TEMP.	T <sub>OPR</sub>	-40 TO +85	°C
STORAGE TEMP.	T <sub>STG</sub>	-40 TO +85	°C

\*DUTY 1/10 PULSE WIDTH 10ms

**NOTES:**

1. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

**CAUTION: MOISTURE SENSITIVE DEVICE**  
 PER JEDEC LEVEL 4 STANDARDS

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.038), 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-LX0805UWC-TR
2.0mm x 1.25mm PCB SURFACE MOUNT, TAPE AND REEL, 550nm ULTRA WHITE, WATER CLEAR LENS.	

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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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BC			PAGE: 1 OF 1
			SCALE: N/A