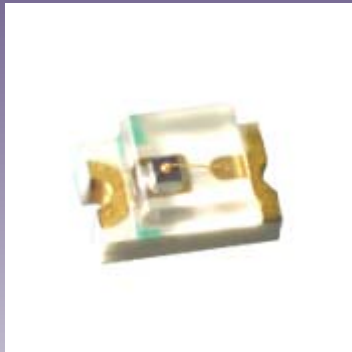




We Tame Photons to Work for You!



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



Features / Options

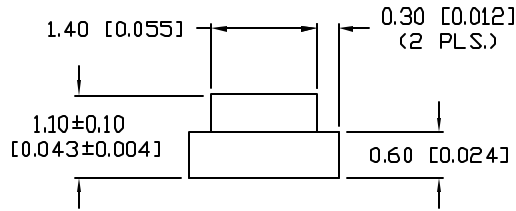
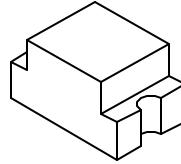
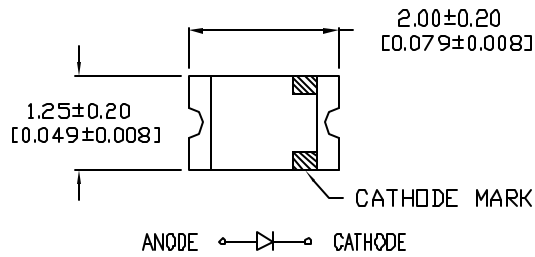
- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

Applications / Uses

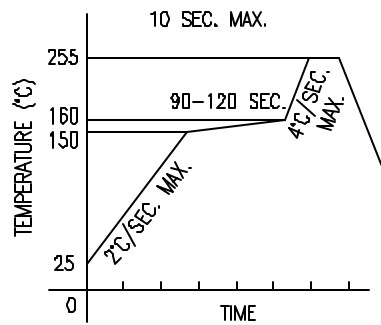
- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

Part Number:	SPEC	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		—

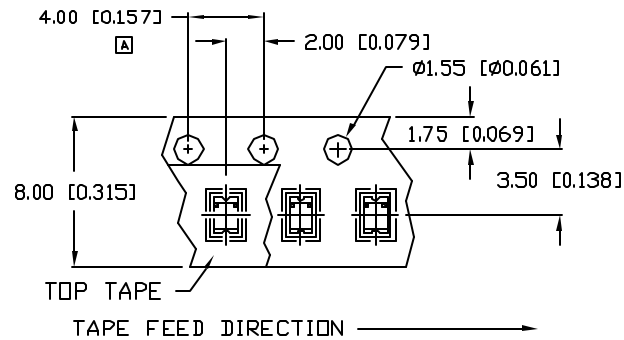
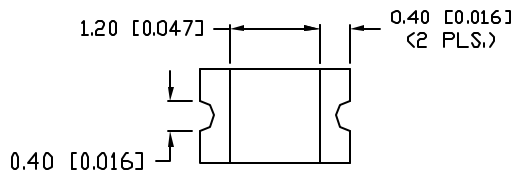
UNCONTROLLED DOCUMENT



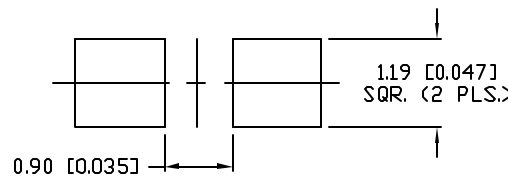
LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.



RECOMMENDED SOLDER PAD LAYOUT



PART NUMBER
SML-LX0805SYC-TR

REV.
E

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10644. & REDRAWN IN 3D.	7.18.00
B	E.C.N. #10862.	5.9.02
C	E.C.N. #10932.	11.25.02
D	E.C.N. #10967.	3.14.03
E	E.C.N. #11148.	8.2.06

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		590		nm	
FORWARD VOLTAGE		2.1	2.8	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_r=100\mu\text{A}$
AXIAL INTENSITY		60		mcad	$I_f=20\text{mA}$
VIEWING ANGLE		140		2x theta	
EMITTED COLOR:	YELLOW				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	160	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	100	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-40 TO +85	°C
STORAGE TEMP.	-40 TO +85	°C

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

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 (±0.038), 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

REV. E PART NUMBER SML-LX0805SYC-TR

2.0mm X 1.25mm PCB SURFACE MOUNT,
590nm SUPER YELLOW, 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.



DRAWN BY: BC CHECKED BY: APPROVED BY: DATE: 10.8.99
PAGE: 1 OF 1
SCALE: N/A