



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

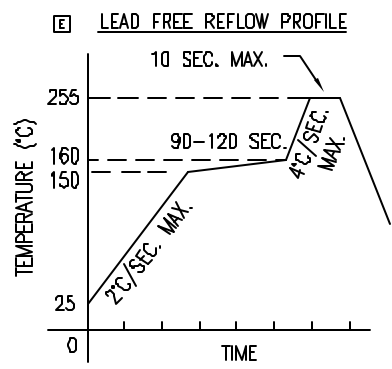
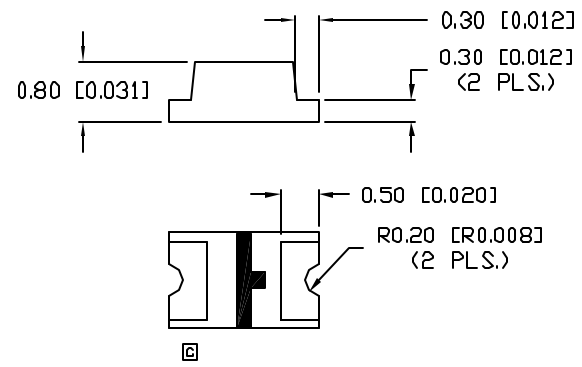
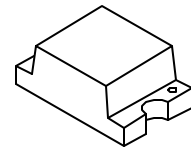
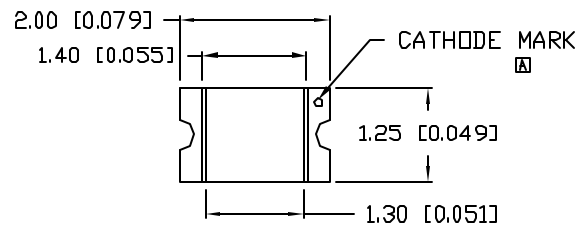
Part Number:	Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
SML-LX0805DRC-TR	HIGH	AllnGaP	Red	660	Clear	2.0	25	140		—
SML-LX0805GC-TR	STANDARD	GaP	Green	565	Clear	2.1	10	140		—
SML-LX0805IC-TR	STANDARD	GaAsP	Red	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		—



UNCONTROLLED DOCUMENT

PART NUMBER		REV.
SML-LXT0805IW-TR		E
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10567.	12.8.99
B	E.C.N. #10695.	1.8.01
C	E.C.N. #10814.	2.25.02
D	E.C.N. #10967.	3.22.04
E	E.C.N. #11148.	12.03.04



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		635		nm	
FORWARD VOLTAGE		2.0	2.5	V _f	
REVERSE VOLTAGE	5.0			V _r	I _f =100μA
AXIAL INTENSITY	4	11		mcad	I _f =20mA
VIEWING ANGLE		140		2x theta	
EMITTED COLOR:	RED				
EPOXY LENS FINISH:	MILKY WHITE DIFFUSED				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	50	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-25 TO +80	°C
STORAGE TEMP.	-30 TO +85	°C

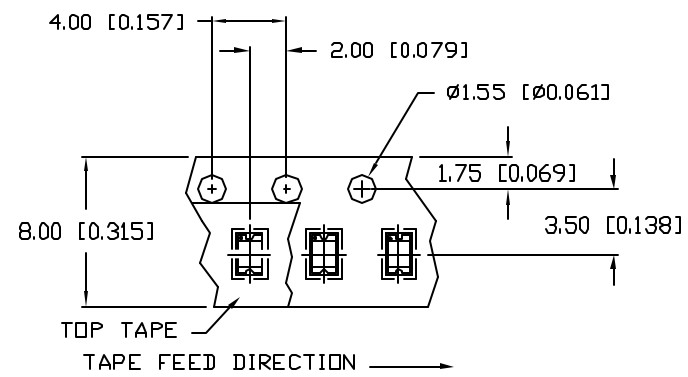
* t < 10μs

NOTES:

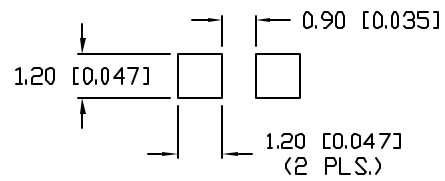
- 4K PER REEL.
- CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.



CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS



RECOMMENDED SOLDER PAD LAYOUT



*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= +DECIMAL PRECISION -0.00 MAX= +0.00 -DECIMAL PRECISION

UNCONTROLLED DOCUMENT

REV.	PART NUMBER
E	SML-LXT0805IW-TR
2.0mm x 1.25mm THIN PCB SURFACE MOUNT, 635nm RED LED, MILKY WHITE DIFFUSED LENS, TAPE AND REEL.	

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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:	CHECKED BY:	APPROVED BY:	DATE: 2.17.99
ct			PAGE: 1 OF 1
			SCALE: N/A