

UNCONTROLLED DOCUMENT

PART NUMBER
SML-LX0402SUGC-TR

REV. E

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10873.	6.4.02
B	E.C.N. #10967.	3.14.03
C	E.C.N. #10983.	4.18.03
D	E.C.N. #11148.	12.03.04
E	E.C.N. #11508.	03.05.09

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	2.6	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_f=100\mu\text{A}$
AXIAL INTENSITY		45		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		120		$2x \theta_{\text{max}}$	
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	100	mW
DERATE FROM 25°C	-1.2	$\text{mW}/^{\circ}\text{C}$
OPERATING TEMP.	-40 TO +85	$^{\circ}\text{C}$
STORAGE TEMP.	-40 TO +85	$^{\circ}\text{C}$

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

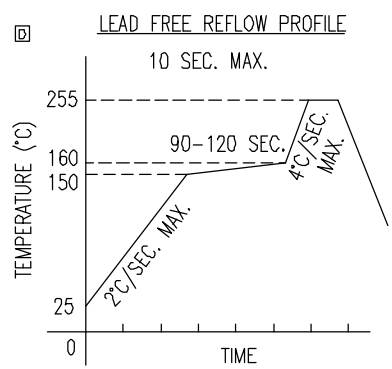
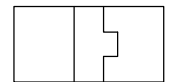
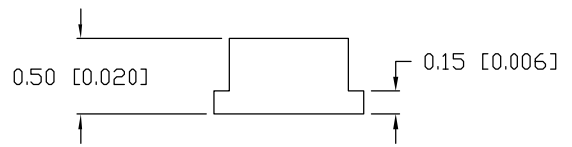
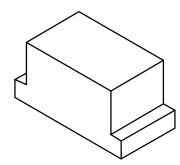
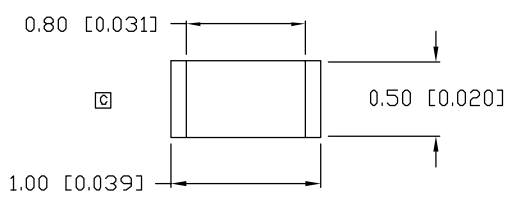
NOTES:

- PARTS PACKAGED IN CONDUCTIVE COVER AND CARRIER TAPE.
- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.



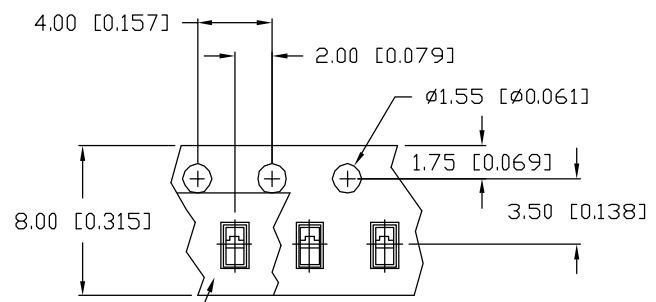
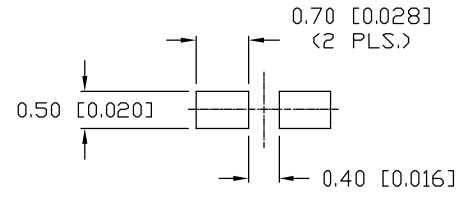
CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 3 STANDARDS

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TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



TOP TAPE
TAPE FEED DIRECTION

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

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1.0mm x 0.5mm SURFACE MOUNT LED,
574nm AlInGaP GREEN LED,
WATER CLEAR 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.

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