

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10BRDR. & 11053.	11.12.03
B	E.C.N. #11148.	12.15.04

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

PARAMETER	RED	GREEN	BLUE	UNITS	TEST COND
PEAK WAVELENGTH	660	565	430	nm	
Δ FORWARD VOLTAGE (TYP.)	1.8	2.2	3.5	V_f	
FORWARD VOLTAGE (MAX.)	2.3	2.6	4.5	V_f	
REVERSE VOLTAGE	4.0	5.0	5.0	V_r	$I_f=100\mu\text{A}$
AXIAL INTENSITY	60	15	8	mcd	$I_f=20\text{mA}$
Δ VIEWING ANGLE	120	120	120	2x theta	
LED POSITION:	1	2	3		
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C PER CHIP

PARAMETER	COLORS	MAX	UNITS
PEAK FORWARD CURRENT*	(R/G/B)	200/160/100	mA
STEADY CURRENT	(R/G/B)	30/25/30	mA
POWER DISSIPATION		110/100/98	mW
DERATE FROM 25°C	(R/G/B)	-1.2/-1.2/-1.6	mW/ $^{\circ}\text{C}$
OPERATING, STORAGE TEMP.		-40 TO +85	$^{\circ}\text{C}$
SOLDERING TEMP.		+260	$^{\circ}\text{C}$
2.0mm FROM BODY		3 SEC. MAX	

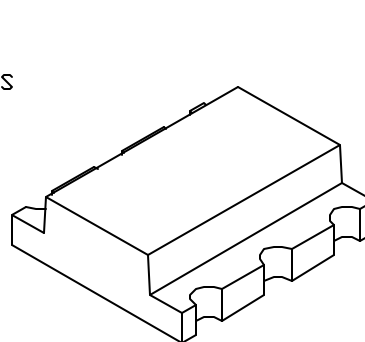
* $t < 10\mu\text{s}$

NOTES:

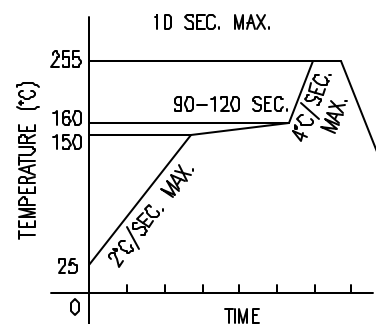
1. THE CATHODE IS ORIENTED TOWARDS THE SPROCKET HOLE.

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

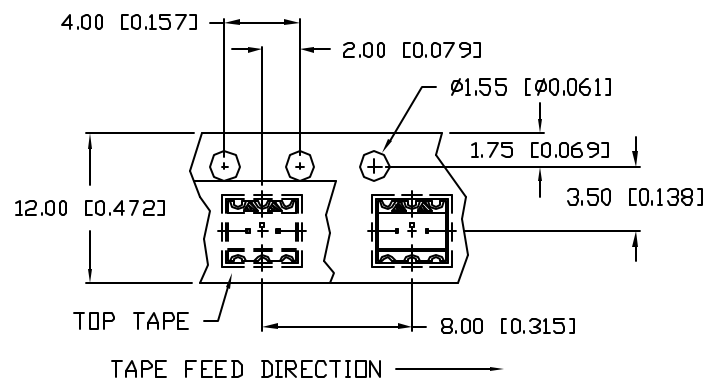
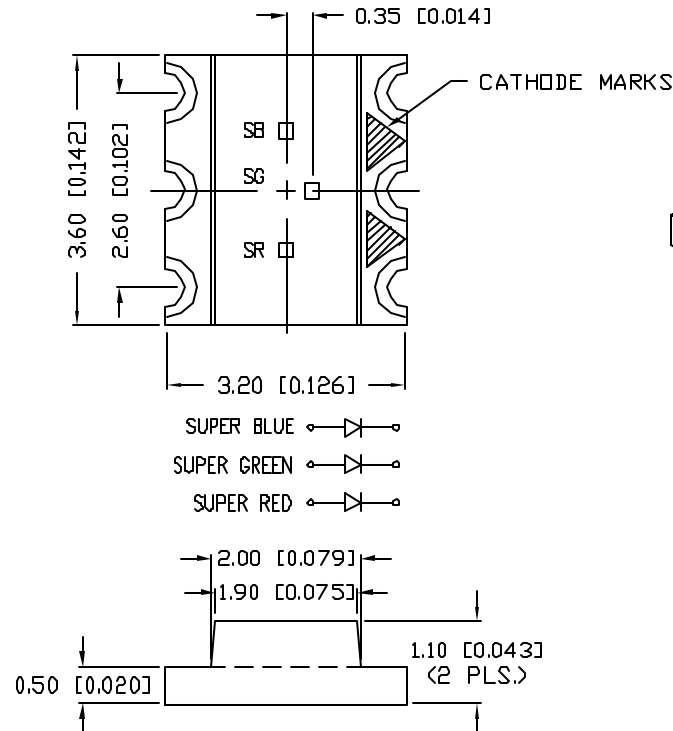
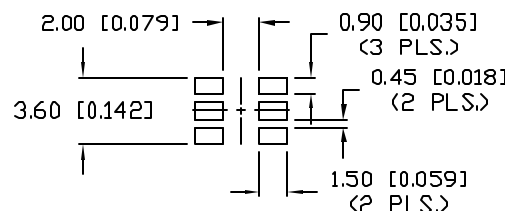
CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS



LEAD FREE REFLOW PROFILE

TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



*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 MAX= +0.00 -DECIMAL PRECISION

REV.

B

PART NUMBER

SML-LX3632SRSGSBC

3.2 X 3.6mm SURFACE MOUNT LED, TRI COLOR,
SUPER RED, SUPER GREEN, SUPER BLUE,
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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PAGE: 1 OF 1

SCALE: N/A