

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #11172.	9.30.04
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	650	574	470	nm	
▲ FORWARD VOLTAGE (TYP.)	2.0	2.1	3.65	V_f	
▲ FORWARD VOLTAGE (MAX.)	2.4	2.5	4.2	V_f	
REVERSE VOLTAGE	5.0	5.0	5.0	V_r	$I_f=100\mu\text{A}$
▲ AXIAL INTENSITY	150	60	60	mcd	$I_f=20\text{mA}$
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)		185/150/160	mA
▲ STEADY CURRENT		30	mA
▲ POWER DISSIPATION		170/105/102	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	

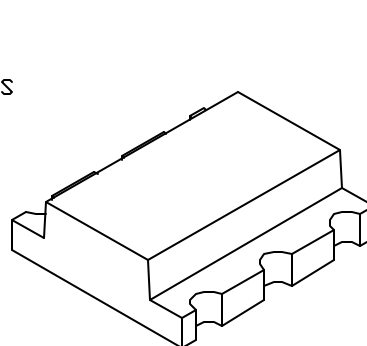
* $t < 10\mu\text{s}$

NOTES:

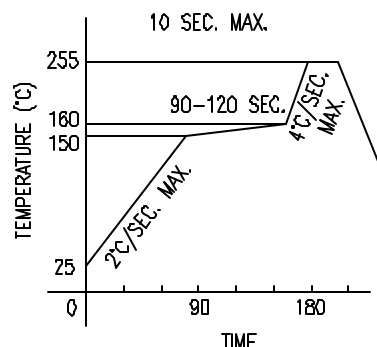
1. THE CATHODE IS ORIENTED TOWARDS THE SPROCKET HOLE.

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

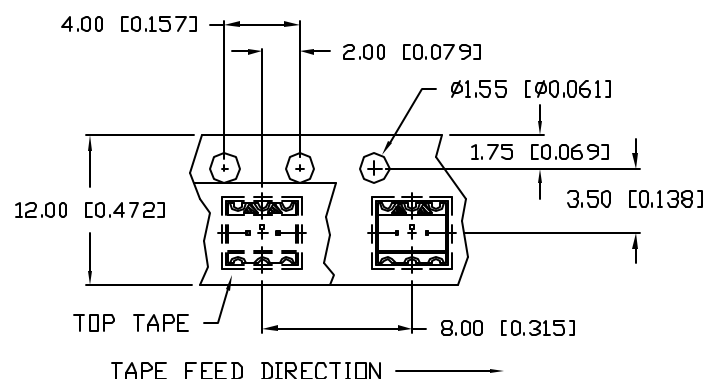
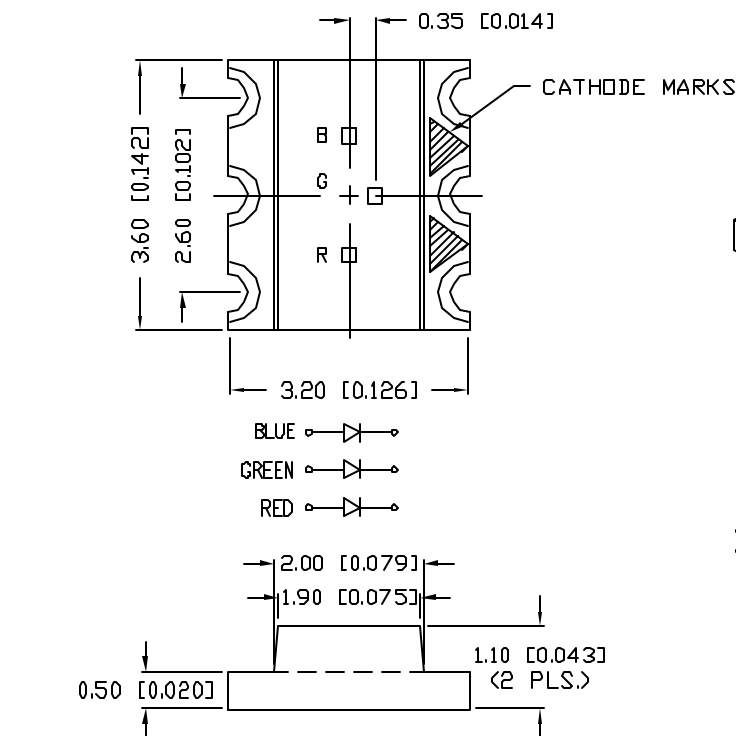
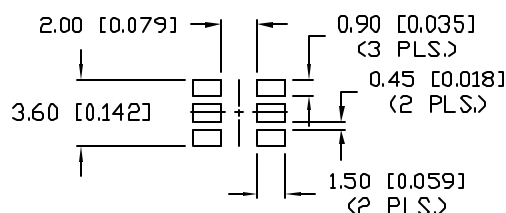
CAUTION: MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 4 STANDARDS



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=-DECIMAL PRECISION

REV.

B

PART NUMBER

SML-LX3632SISUGUSB

3.2 x 3.6mm SURFACE MOUNT LED, TRI COLOR,
SUPER RED, SUPER ULTRA GREEN, ULTRA SUPER BLUE,
WATER CLEAR LENS, TAPE AND REEL

CONFIDENTIAL INFORMATION

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

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.



290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

DRAWN BY:

BC

CHECKED BY:

APPROVED BY:

DATE: 5.27.04

PAGE: 1 OF 1

SCALE: N/A