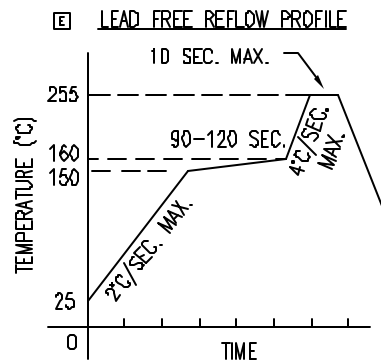
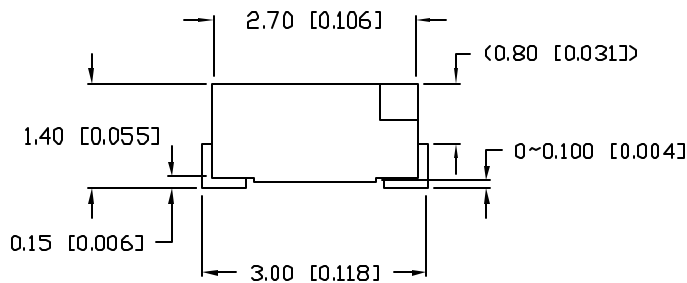
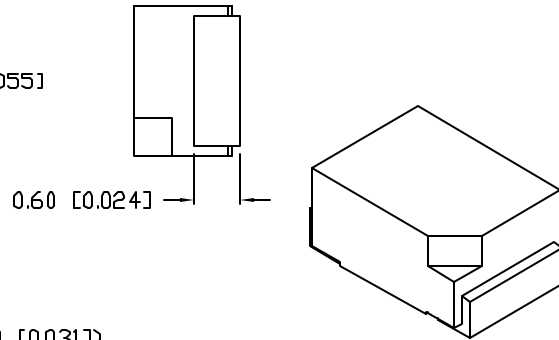
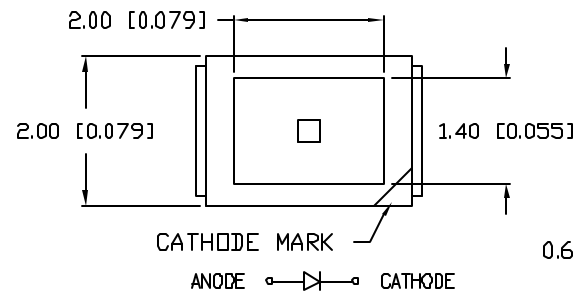


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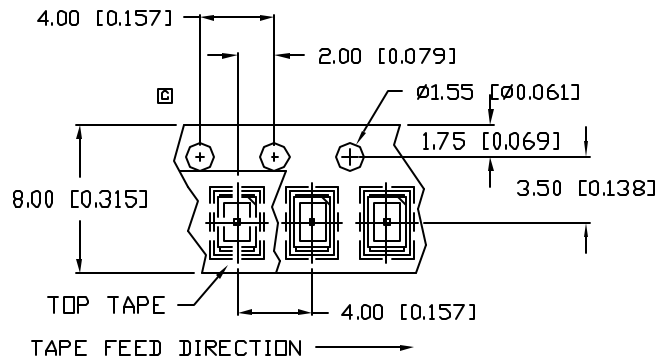
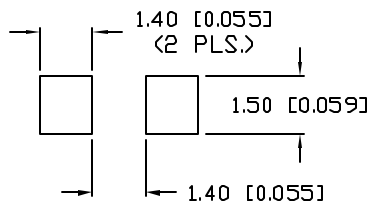
PART NUMBER  
SML-LX231C-TR

REV.  
E



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10BRDR, ADDED REFLOW PROFILE.	2.5.99
B	E.C.N. #10543.	8.9.99
C	E.C.N. #106695.	1.5.01
D	E.C.N. #10967.	3.14.03
E	E.C.N. #11148.	2.7.05

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			$V_r$	$I_r=100\mu\text{A}$
AXIAL INTENSITY		20		mcad	$I_f=20\text{mA}$
VIEWING ANGLE		90		$2\theta$	
EMITTED COLOR:	RED				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C PER CHIP

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.	-25 TO +80	°C
STORAGE TEMP.	-30 TO +85	°C

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

NOTES:

1. 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 (±0.039), 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

REV.	PART NUMBER
E	SML-LX231C-TR
2mm x 3mm SURFACE MOUNT WITH REFLECTOR, 635nm RED LED, WATER CLEAR LENS.	

**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.

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DATE: 3.7.97		PAGE: 1 OF 1
SCALE: N/A		