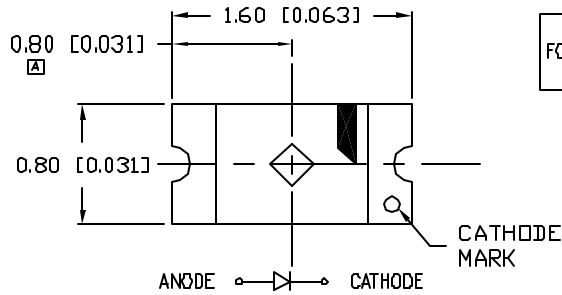
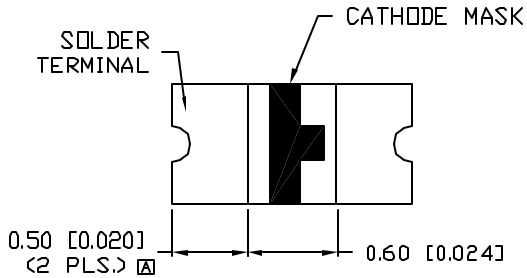
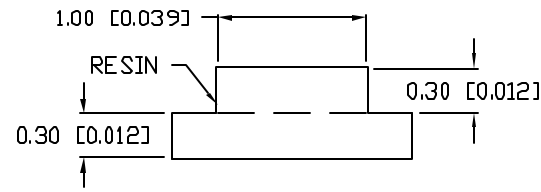
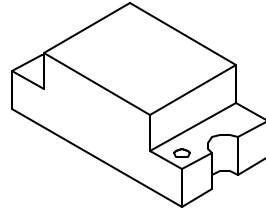


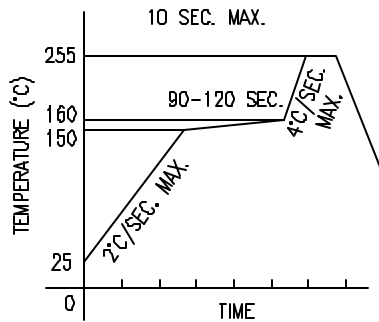
UNCONTROLLED DOCUMENT



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

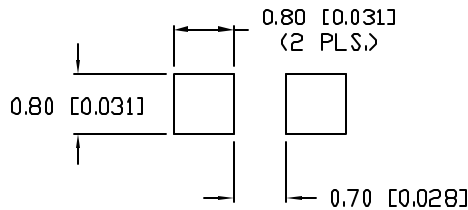
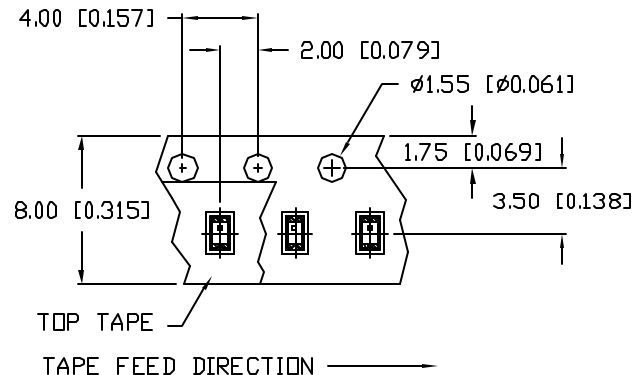


LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

RECOMMENDED SOLDER PAD LAYOUT



PART NUMBER		REV.
SML-LX0603USBW-TR		C

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10933.	12.3.02
B	E.C.N. #10967.	3.14.03
C	E.C.N. #11148.	12.07.04

ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ $I_f=20\text{mA}$					
PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		470		nm	
FORWARD VOLTAGE		3.5	4.0	V <sub>f</sub>	
REVERSE VOLTAGE	5.0			V <sub>r</sub>	I <sub>r</sub> =100μA
AXIAL INTENSITY		20		mcad	I <sub>f</sub> =20mA
VIEWING ANGLE		140		2x theta	
EMITTED COLOR:	BLUE				
EPOXY LENS FINISH:	MILKY WHITE DIFFUSED				

LIMITS OF SAFE OPERATION AT 25°C		
PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	150	mA
STEADY CURRENT	25	mA
POWER DISSIPATION	50	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-25 TO +85	°C
STORAGE TEMP.	-30 TO +85	°C

\* t<10μs

NOTES:

1. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

**CAUTION: MOISTURE SENSITIVE DEVICE**  
 PER JEDEC LEVEL 4 STANDARDS



\*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.	PART NUMBER
C	SML-LX0603USBW-TR

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1.6mm x 0.8mm PCB CHIP, SURFACE MOUNT LED,  
 470nm ULTRA SUPER BLUE, MILKY WHITE DIFFUSED LENS.

**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:
CT			4.14.02
			PAGE: 1 OF 1
			SCALE: N/A