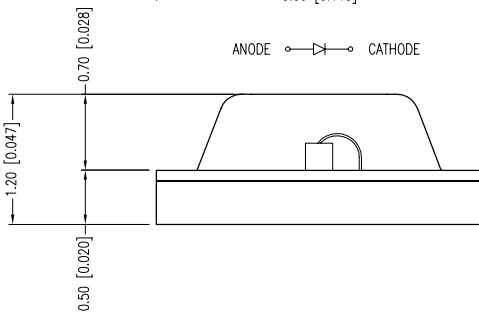
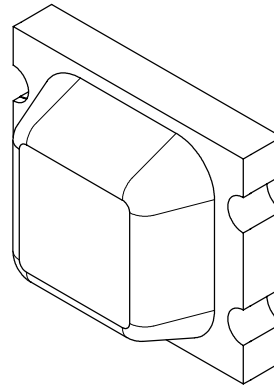
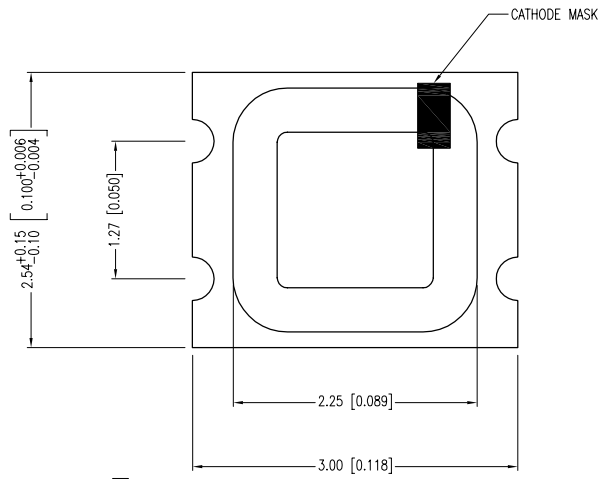
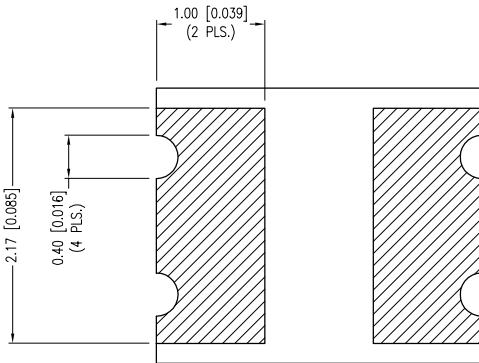


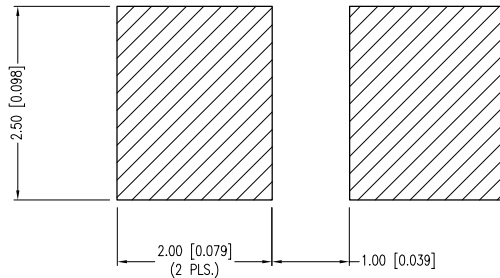
PART NUMBER	CCL-CRS10SR	REV.	H
DATE	E.C.N. NUMBER AND REVISION COMMENTS	REV.	
04.27.00	REDRAWN.	A	
03.20.95	CORRECTED DIMS.	B	
10.02.98	E.C.N. #10390 #10BRDR. & REDRAWN.	C	
12.11.98	E.C.N. #10484. ADDED SOLDER SPECS.	D	
01.12.01	E.C.N. #10695. & REDRAWN IN 3D.	E	
03.14.03	E.C.N. #10967.	F	
12.01.06	E.C.N. #11148.	G	
06.17.11	E.C.N. #10BRDR. & REDRAWN/#11730.	H	



ANODE CATHODE



RECOMMENDED SOLDER PAD LAYOUT



ELECTRO-OPTICAL CHARACTERISTICS TA =25°C If=20mA					
PARAMETER	MIN	TYP.	MAX	UNITS	TEST COND
PEAK WAVELENGTH		660		nm	
FORWARD VOLTAGE		1.7	2.2	Vf	
REVERSE VOLTAGE	4.0			Vr	Ir=100µA
AXIAL INTENSITY		40		mcd	If=20mA
VIEWING ANGLE		180		2x theta	
EMITTED COLOR:	RED				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	60	mA
STEADY CURRENT	15	mA
POWER DISSIPATION	45	mW
DERATE FROM 25°C	-.33	mW/°C
OPERATING TEMP.	-30 TO +75	°C
STORAGE TEMP.	-40 TO +85	°C

\* t<10µs

SOLDER HEAT PROOF TEST:	DIPPING FOR 5 SEC. AT 250°C, 2 TIMES.
THERMAL SHOCK TEST:	15 MIN. AT +90°C, AND 15 MIN. AT -30°C, 25 CYCLES.
VIBRATION TEST:	50Hz, FULL AMPLITUDE WIDTH; 1.5mm, 2 HOURS VERTICALLY AND HORIZONTALLY, RESPECTIVELY.
MOISTURE TEST:	Ta=60°C, Rh=90%, 1,000 HOURS.
IRON SOLDERING:	20W IRON (SHARP TIP), 280-320°C, 5 SEC. MAX.,
SOLDER DIP METHOD:	TEMP. IS 240-260°C AND TIME IS WITHIN 10 SEC.
RE-FLOW SOLDERING:	SEE CHART.

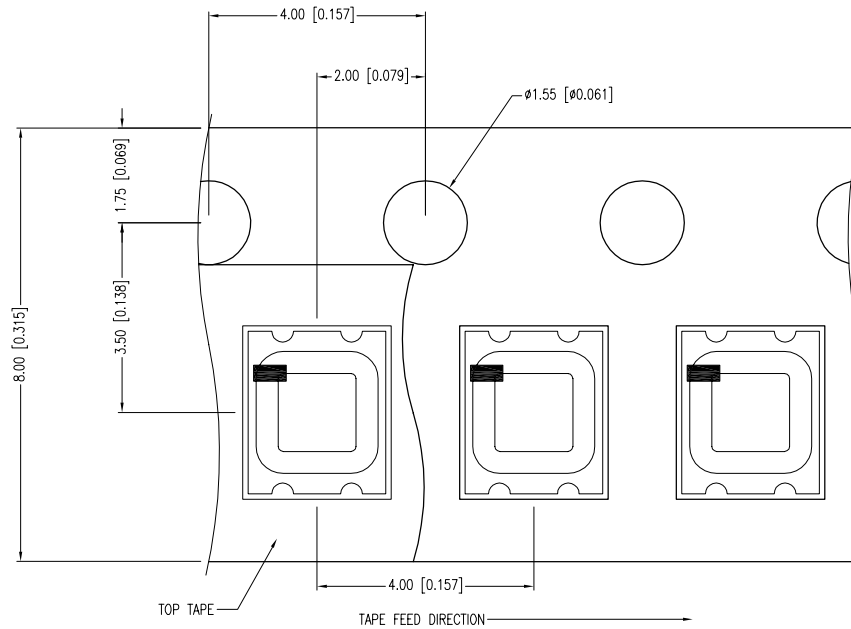
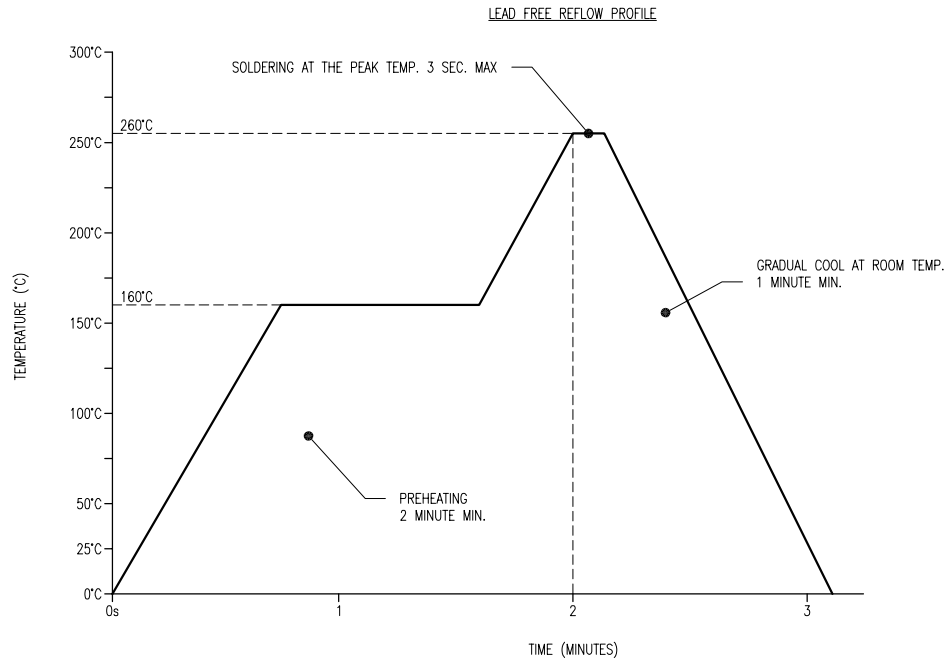
G F CAUTION: MOISTURE SENSITIVE DEVICE PER JEDEC LEVEL 2A STANDARDS

\*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.= <sup>+DECIMAL PRECISION</sup><sub>-0.00</sub> MAX.= <sup>+0.00</sup><sub>-DECIMAL PRECISION</sub>

**LUMEX**  
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3.0mm x 2.5mm CERAMIC SURFACE MOUNT LED, 660nm SUPER RED LED, WATER CLEAR LENS.  
 \*\*THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.\*\*  
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DATE:	06.17.11	DRAWN BY:	AB
PAGE:	1 OF 2	CHKD BY:	KF
SCALE:	NTS	APRVD BY:	SS
UNIT:	mm [INCH]		Ⓟ



**NOTES:**

1. PART SUPPLIED ON SUPER 8 TAPE AND REEL, 3,000 PIECES PER REEL.
2. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.
3. WHITE CERAMIC CARRIER.

\*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.= <sup>+0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION MAX.= <sup>+0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION



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