



PART NUMBER		REV.
CCL-CRS10SR/Y		G
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	REDRAWN.	4.27.93
B	E.C.N. #10390 & #10BRDR & REDRAWN.	10.2.98
C	E.C.N. 104B4. ADDED SOLDER PROFILE	12.11.98
D	E.C.N. #10695. & REDRAWN IN 3D.	1.12.01
E	E.C.N. #10967.	3.14.03
F	E.C.N. #11271.	9.16.05
G	E.C.N. #11148.	01.19.07

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		660 (RED)		nm	
		585 (YELLOW)		nm	
FORWARD VOLTAGE (R/Y)		1.7/2.1	2.3/2.8	V_f	
REVERSE VOLTAGE (R/Y)	3.0/4.0			V_r	$I_f=100\mu\text{A}$
AXIAL INTENSITY		8		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		180		2x theta	
EMITTED COLOR:	RED/YELLOW				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	COLORS	MAX	UNITS
PEAK FORWARD CURRENT*	(R/Y)	60/100	mA
STEADY CURRENT	(R/Y)	15/25	mA
POWER DISSIPATION	(R/Y)	45/70	mW
DERATE FROM 25°C	(R/Y)	-0.13/0.33	mW/°C
OPERATING TEMP.		-30 TO +75	°C
STORAGE TEMP.		-40 TO +85	°C

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

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:	$T_a=60^\circ\text{C}$, $R_h=90\%$, 1,000 HOURS.
IRON SOLDERING:	20W IRON (SHARP TIP), 280-320°C, 5 SEC. MAX.,
SOLDER DIP METHODE:	TEMP. IS 240-260°C AND TIME IS WITHIN 10 SEC.
RE-FLOW SOLDERING:	SEE CHART.

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3.0mm x 2.5mm CERAMIC SURFACE MOUNT LED, SUPER RED & YELLOW LEDS, 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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