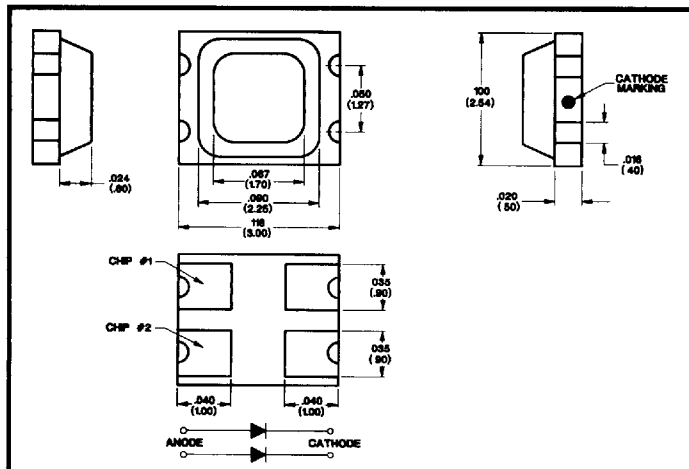




Surface Mount LED Lamps — Dual Chip (Size: 1210)

DESCRIPTION AND FEATURES



Chicago Miniature Lamp's Surface Mount LED lamps are designed to be compatible with today's state of the art surface mount technology. These LED lamps are manufactured on a ceramic substrate making them significantly more resistant to processing temperatures. This design allows the user to process these units alongside other surface mount components through any of today's surface mount techniques. These LED lamps are packaged on 8mm tape, allowing for easy automated placement. LED lamps are available in Red, Green, Yellow, Amber and Ultra Red in unique bi-color and dual chip extra bright configurations.

4 Solid State Products

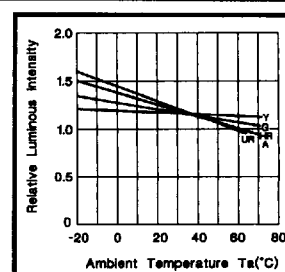
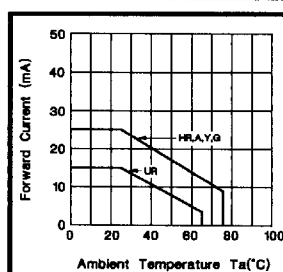
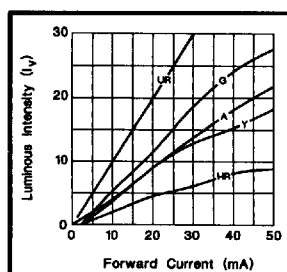
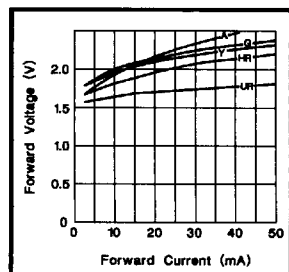
ELECTRO-OPTICAL CHARACTERISTICS

Part Number	Emitted Color	Lens Color	Package Type	Luminous Intensity			Forward Voltage			Capacitance pF Vr=0, f=1MHz	Peak Wavelength (nm)	View Angle (Degrees)
				Min. mcd	Typ. mcd	mA	Typ.	Max.	mA			
CMD11304HR	H.E. Red	Clear	Dual	2.6	7.0	20	2.0	2.6	20	—	630	100
CMD11304Y	Yellow	Clear	Dual	5.0	14.0	20	2.1	2.8	20	—	585	100
CMD11304A	Amber	Clear	Dual	5.0	14.0	20	2.1	2.8	20	—	610	100
CMD11304G	H.E. Green	Clear	Dual	11.0	22.0	20	2.0	2.6	20	—	565	100
CMD11304UR	Ultra Red	Clear	Dual	8.0	14.0	10	1.7	2.6	10	—	660	100
CMD11354HRG	H.E. Red	Clear	Dual	1.6	4.0	20	2.0	2.6	20	—	630	100
	H.E. Green	Clear		6.0	12.0	20	2.0	2.6	20	—	565	100
CMD11354AG	Amber	Clear	Dual	3.0	8.0	20	2.1	2.8	20	—	610	100
	H.E. Green	Clear		6.0	12.0	20	2.0	2.6	20	—	565	100
CMD11354URG	Ultra Red	Clear	Dual	4.0	8.0	10	1.7	2.6	10	—	660	100
	H.E. Green	Clear		6.0	12.0	20	2.0	2.6	20	—	565	100

ABSOLUTE MAXIMUM RATINGS

	H.E. Red	Yellow	Amber	H.E. Green	Ultra Red	Units
Power Dissipation	65	70	80	65	45	mW
Storage/Operating Temperature	-25 to +75	-25 to +75	-25 to +75	-25 to +75	-25 to +75	°C
Lead Solder Time at 260°C	10	10	10	10	10	Seconds
Peak Forward Current (1 micro second @ 10% duty cycle)	100	100	100	100	60	mA
Reverse Voltage (IR = 100µA)	4.0	4.0	4.0	4.0	3.0	V
Average Forward Current	25	25	25	25	15	mA

TYPICAL CHARACTERISTIC CURVES



Chicago Miniature Lamp reserves the right to make specification revisions that enhance the design and/or performance of the product.