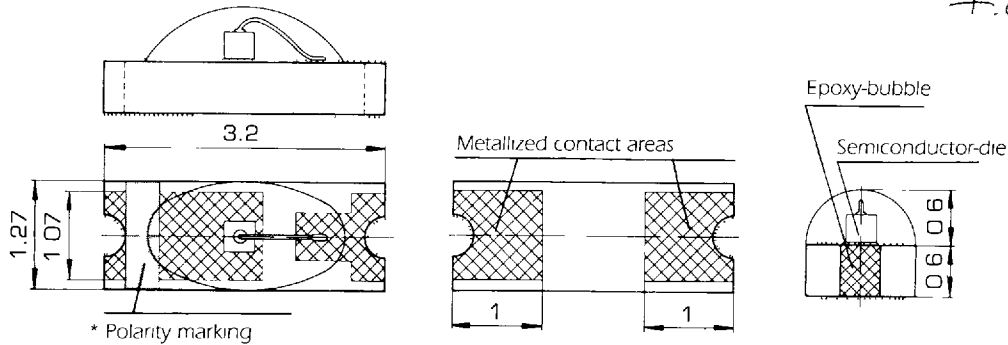


STETCO INC

43E D ■ 8651425 0003233 205 ■ STCO

7-41-19



LED ON A CERAMIC SUBSTRATE . MAY BE ATTACHED BY ALL CUSTOMARY TECHNIQUES:
CONDUCTIVE EPOXY, REFLOW SOLDERING, VAPOR PHASE, AND WAVE SOLDERING.
*CATHODE FOR ALL EXCEPT: ANODE FOR CRIOSR, COLLECTOR FOR CRIOTE.

SPECIFICATIONS

POWER DISSIPATION	130mW max
DERATING LINEAR	2.7mW/°C
REVERSE VOLTAGE	5V (10V CRIQ IR)
LEAKAGE CURRENT	100µA
CONTINUOUS FORWARD CURRENT	75mA
PEAK FORWARD CURRENT FOR 10mSEC.	800mA
OPERATING TEMPERATURE RANGE	-25°C TO 80°C
STORAGE TEMPERATURE RANGE	-25°C TO 120°C
JUNCTION TEMPERATURE	120°C
SOLDERING TEMPERATURE	10SEC AT 250°C

OPTO-ELECTRONIC CHARACTERISTICS

LED'S AT 25° C.

PART NUMBER	FORWARD VOLTAGE	LUMINOUS INTENSITY IF 20mA (MCD)		EMISSION PEAK WAVELENGTH
		MIN	TYP	
CR10R	1.5	2.0	7.2	630nm
CR10Y	2.1	2.0	7.0	585nm
CR10SG	2.1	1.0	6.9	565nm
CR10YG	1.8	2.8	7.2	570nm
CR10NR	1.65	2.3	5.6	650nm
CR10SR	1.5	8	20	655nm
CR10A	1.9	-	5.3	615nm

PART NUMBERS

CR10-R	ORANGE RED	CR10-A	AMBER
CR10-Y	YELLOW	CR10-IR	INFRA RED
CR10-G	STANDARD GREEN	CR10-SIR	SUPER INFRA RED CLEAR LENS
CR10-YG	YELLOW GREEN	CR10-TE	PHOTO TRANSISTORS
CR10-NR	NORMAL RED	CR10-DE	PHOTO DIODES
CR10-SR	SUPER RED		

STETCO INC

43E D ■ 8651425 0003234 141 ■ STCO

T-41-11

OPTO-ELECTRONIC CHARACTERISTICS

CR 10- IR INFRA RED If=20mA AT 25°C

PEAK EMISSION WAVE LENGTH	940nm
SPECTRAL HALF BANDWIDTH	40nm
RADIATED POWER	3.0mW min 4.5mW TYPICAL
FORWARD VOLTAGE	1.5V TYPICAL 1.9V MAX
REVERSE LEAKAGE CURRENT	100µA

OPTO-ELECTRONIC CHARACTERISTICS

CR 10-SIR INFRA RED If=20mA AT 25°C

PEAK EMISSION WAVE LENGTH	880nm
SPECTRAL HALF BANDWIDTH	80nm
RADIATED POWER	4.0mW MIN 8.0mW TYPICAL
FORWARD VOLTAGE	1.9 TYPICAL 2.2 MAX
REVERSE LEAKAGE CURRENT	100µA

OPTO-ELECTRONIC CHARACTERISTICS

CR 10-TE PHOTO TRANSISTOR AT 25°C

PEAK WAVELENGTH SENSITIVITY	850nm
SPECTRAL HALF BANDWIDTH	400...1100nm
COLLECTOR LIGHT CURRENT	1mA(Uce=5V, Ev=1000 1x)
COLLECTOR DARK CURRENT	100nA(Uce=10V, Ev=0)
COLLECTOR-EMITTER-SATURATION VOLTAGE	0.3V(Ic=1mA, Ev=1000 1x)
RISE TIME, FALL TIME	3µS(Uce=2V, Iph=2mA, RL=100Ω)

OPTO-ELECTRONIC CHARACTERISTICS

CR 10 -DE PHOTO DIODE AT 25°C

PEAK WAVELENGTH SENSITIVITY	820nm
SPECTRAL HALF BANDWIDTH	530...1000nm
SHORT CIRCUIT CURRENT	2.0mA(E=1000 1x)
PHOTO VOLTAGE TYPICAL	390mV(E=1000 1x, RL=∞)
PHOTO VOLTAGE MINIMUM	300mV(E=1000 1x, RL=∞)
DARK CURRENT MAX	1NA(U=1V, E=0)
JUNCTION CAPACITANCE	25pf(U=0V, E=0, f=1MHz)