

DESCRIPTION:

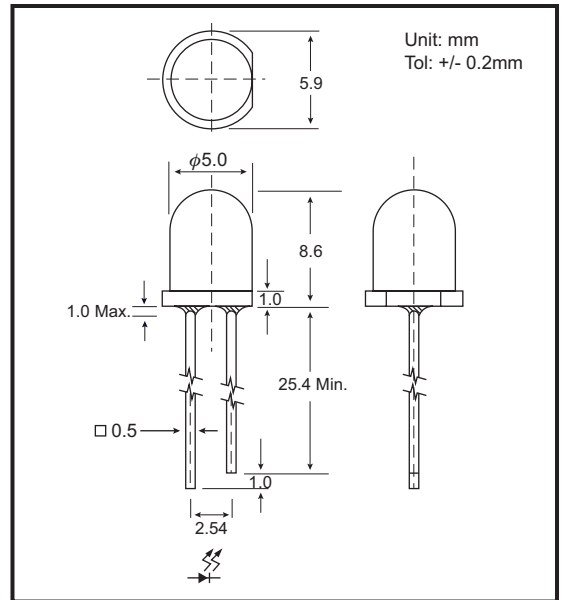
The IR333 series is high power solution infrared emitting diodes encapsulated in blue transparent or water clear plastic package. These products have high radiant intensity and are suitable for pulsed applications.

ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)

Parameter	Max
Reverse Voltage	5 Volt
Reverse Current (Vr =5V)	100μA
Continuous Forward Current	35mA
Peak Forward Current (1-10 Duty Cycle, 0.1ms Pulse Width)	100mA
Operating Temperature Range	-40°C To +85°C
Storage Temperature Range	-55°C To +100°C
Lead Soldering Temperature 1.6mm(.06") from body 260°C for 5 seconds	

NOTES : 1. All dimensions are in millimeters.
2. Lead spacing is measured where the leads emerge from the package.
3. Protuded resin under flange is 1.5 mm (0.059") Max.

PACKAGE DIMENSIONS



PART NO. SELECTION AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)

Part No.	Chips Raw Material	Lens Color	Peak Wave Length λ_p (nm)	Spectral Line Half-Width $\Delta\lambda$ (nm)	Power Dissipation P_D (mW)	Forward Voltage V_f (v)		Rec. If (mA).	Terminal Capacitance C_t (pF) Typ.	Radiant Intensity I_e (mW/Sr)		Typical Viewing Angle $2\theta_{1/2}$ (Deg)
						Min	Max			Min	Typ.	
GB-IR333A21C GB-IR333A21BT	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	15.0	30.0	20
		B.T.										
GB-IR333A31C GB-IR333A31BT	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	10.0	20.0	30
		B.T.										
GB-IR333A51C GB-IR333A51BT	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	4.0	9.0	50
		B.T.										
GB-IR333B21C GB-IR333B21BT	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	17.7	30.8	20
		B.T.										
GB-IR333B31C GB-IR333B31BT	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	11.8	20.5	30
		B.T.										
GB-IR333B51C GB-IR333B51BT	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	5.0	10.0	50
		B.T.										
GB-IR333C21C GB-IR333C21BT	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	15	37.5	20
		B.T.										
GB-IR333C31C GB-IR333C31BT	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	10.0	25.0	30
		B.T.										
GB-IR333C51C GB-IR333C51BT	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	5.0	12.0	50
		B.T.										

(W.C. = Water Clear)
(B.T. = Blue Transparent)

TESTING CONDITION FOR EACH PARAMETER :

Parameter	Symbol	Unit	Test Condition
Forward Voltage	V_f	V	$I_f=20mA$
Peak Emission Wave Length	λ_p	nm	$I_f=20mA$
Spectral Line Half-Width	$\Delta\lambda$	nm	$I_f=20mA$
Reverse Current	I_r	mA	$V_r=5V$
Radiant Intensity	I_e	mW/Sr	$I_f=20mA$
Terminal Capacitance	C_t	pF	$f=1MHz$
View Angle	$2\theta_{1/2}$	Deg	

