

DESCRIPTION:

The IR224 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	

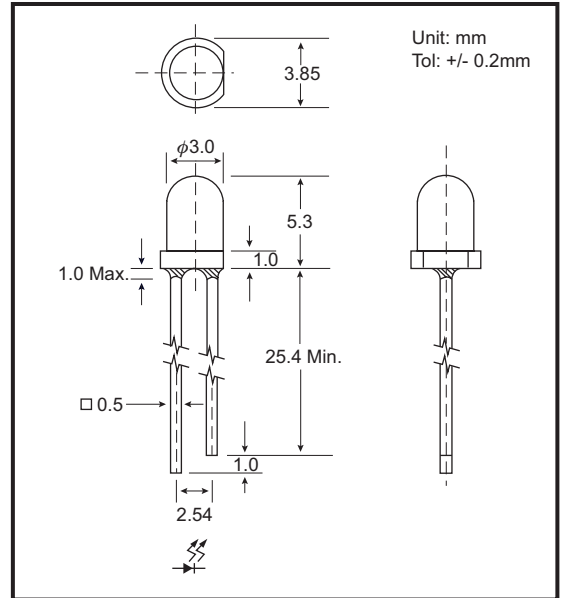
NOTES : 1. All dimensions are in millimeters.

2. Lead spacing is measured where the leads emerge from the package.

3. Protuded resin under flange is 1.5 mm (0.059") Max.

4. Specifications are subject to change without notice.

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-IR224A31C	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	5.0	11.0	30
GB-IR224A31BT		B.T.										
GB-IR224A51C	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	1.5	3.0	50
GB-IR224A51BT		B.T.										
GB-IR224B21C	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	8.8	21.0	20
GB-IR224B21BT		B.T.										
GB-IR224B31C	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	5.0	12.0	30
GB-IR224B31BT		B.T.										
GB-IR224B51C	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	1.5	4.0	50
GB-IR224B51BT		B.T.										
GB-IR224C21C	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	8.8	23.0	20
GB-IR224C21BT		B.T.										
GB-IR224C31C	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	5.0	13.0	30
GB-IR224C31BT		B.T.										
GB-IR224C51C	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	1.6	4.5	50
GB-IR224C51BT		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	

