

### DESCRIPTION:

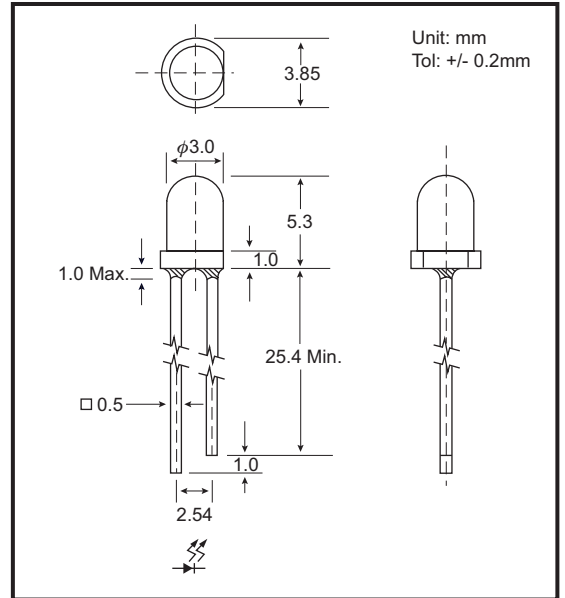
The IR224 series is high power solution infrared emitting diodes encapsulated in blue transparent or water clear plastic package. These products have high radiant intensity and are suitable for pulsed applications.

### 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.

### PACKAGE DIMENSIONS



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

Part No.	Chips Raw Material	Lens Color	Peak Wave Length $\lambda_p$ (nm)	Spectral Line Half-Width $\Delta\lambda$ (nm)	Power Dissipation Pd (mW)	Forward Voltage Vf (v)		Rec. If (mA)	Terminal Capacitance Ct (pF) Typ.	Radiant Intensity Ie (mW/Sr)		Typical Viewing Angle $2\theta_{1/2}$ (Deg)
						Min	Max			Min	Typ.	
GB-IR224A31C GB-IR224A31BT	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	5.0	11.0	30
		B.T.										
GB-IR224A51C GB-IR224A51BT	AlGaAs	W.C.	940	60	95	1.2	1.5	20	20	1.5	3.0	50
		B.T.										
GB-IR224B21C GB-IR224B21BT	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	8.8	21.0	20
		B.T.										
GB-IR224B31C GB-IR224B31BT	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	5.0	12.0	30
		B.T.										
GB-IR224B51C GB-IR224B51BT	AlGaAs	W.C.	880	70	95	1.3	1.6	20	20	1.5	4.0	50
		B.T.										
GB-IR224C21C GB-IR224C21BT	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	8.8	23.0	20
		B.T.										
GB-IR224C31C GB-IR224C31BT	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	5.0	13.0	30
		B.T.										
GB-IR224C51C GB-IR224C51BT	AlGaAs	W.C.	850	60	95	1.5	1.8	20	20	1.6	4.5	50
		B.T.										

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

### TESTING CONDITION FOR EACH PARAMETER :

Parameter	Symbol	Unit	Test Condition
Forward Voltage	Vf	V	If=20mA
Peak Emission Wave Length	$\lambda_p$	nm	If=20mA
Spectral Line Half-Width	$\Delta\lambda$	nm	If=20mA
Reverse Current	Ir	mA	Vr=5V
Radiant Intensity	Ie	mW/Sr	If=20mA
Terminal Capacitance	Ct	pF	f=1MHz
View Angle	$2\theta_{1/2}$	Deg	

