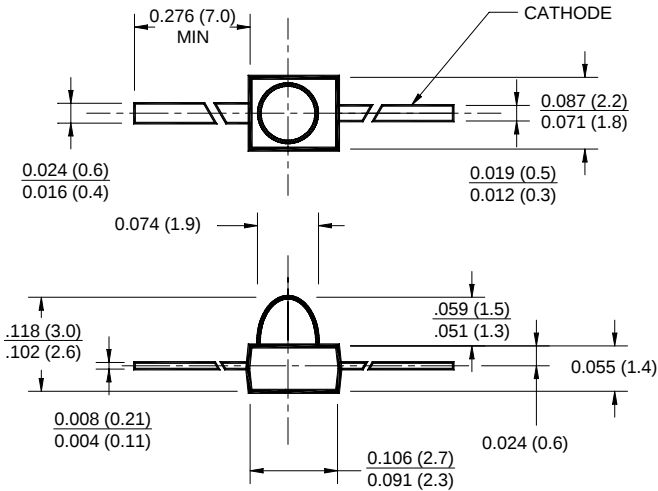
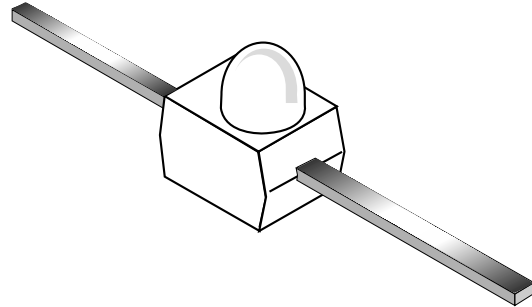


PACKAGE DIMENSIONS



NOTES:

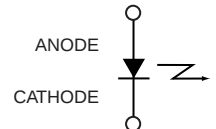
1. Dimensions are in inches (mm).
2. Tolerance of $\pm .010$ (.25) on all non nominal dimensions unless otherwise specified.



FEATURES

- T-3/4 (2mm) Surface Mount Package
- Tape & Reel Option (See Tape & Reel Specifications)
- Lead Form Options: Gullwing, Yoke, Z-Bend
- Narrow Emission Angle, 24°
- Wavelength = 880nm, AlGaAs
- Clear Lens
- Matched Photosensor: QSB363
- High Radiant Intensity

SCHEMATIC



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Units
Operating Temperature	T_{OPR}	-40 to +100	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 to +100	$^\circ\text{C}$
Soldering Temperature (Iron) ^(2,3,4)	T_{SOL-I}	240 for 5 sec	$^\circ\text{C}$
Soldering Temperature (Flow) ^(2,3)	T_{SOL-F}	260 for 10 sec	$^\circ\text{C}$
Continuous Forward Current	I_F	50	mA
Reverse Voltage	V_R	5	V
Power Dissipation ⁽¹⁾	P_D	100	mW

NOTES

1. Derate power dissipation linearly 1.33 mW/ $^\circ\text{C}$ above 25°C .
2. RMA flux is recommended.
3. Methanol or isopropyl alcohols are recommended as cleaning agents.
4. Soldering iron tip at 1/16" (1.6mm) from housing

ELECTRICAL / OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Peak Emission Wavelength	$I_F = 100\text{mA}$	λ_P	—	880	—	nm
Emission Angle	$I_F = 100\text{mA}$	θ	—	± 12	—	Deg.
Forward Voltage	$I_F = 100\text{mA}$, $t_p = 20\text{ms}$	V_F	—	—	1.7	V
Reverse Current	$V_R = 5\text{V}$	I_R	—	—	100	μA
Radiant Intensity	$I_F = 100\text{mA}$, $t_p = 20\text{ms}$	I_e	16	—	—	mW/sr
Rise Time	$I_F = 100\text{mA}$,	t_r	—	800	—	ns
Fall Time	$t_p = 20\text{ms}$	t_f	—	800	—	ns

TYPICAL PERFORMANCE CURVES

Fig. 1 Maximum Forward Current vs. Temperature

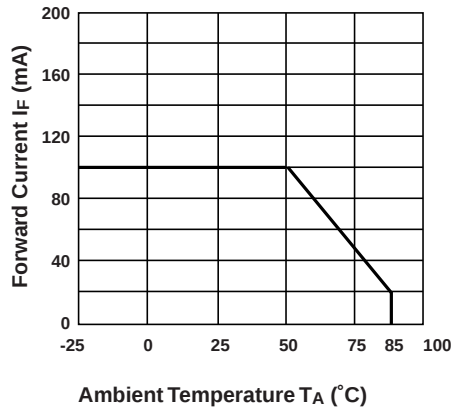


Fig. 2 Relative Radiant Intensity vs. Wavelength

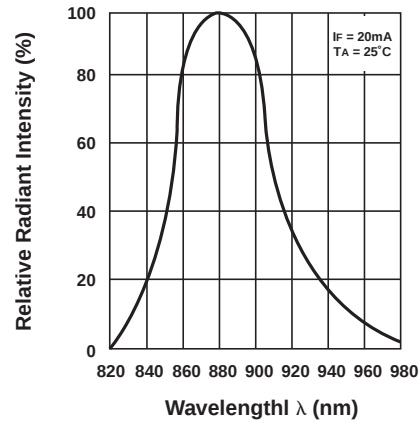


Fig. 3 Peak Emission Wavelength vs. Ambient Temperature

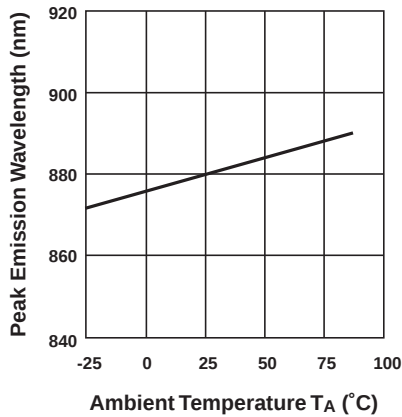


Fig. 4 Forward Current vs. Forward Voltage

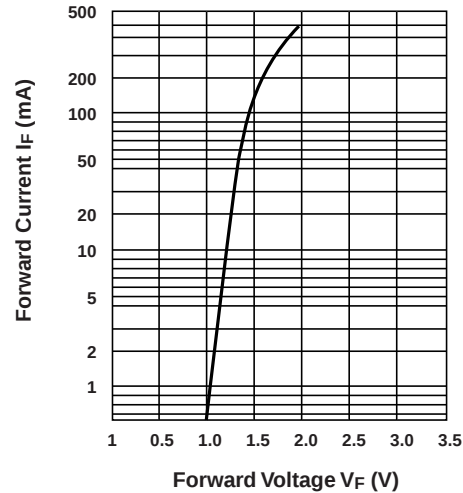


Fig. 5 Relative Radiant Flux vs. Ambient Temperature

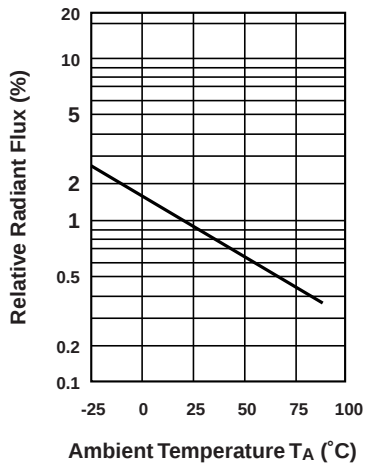
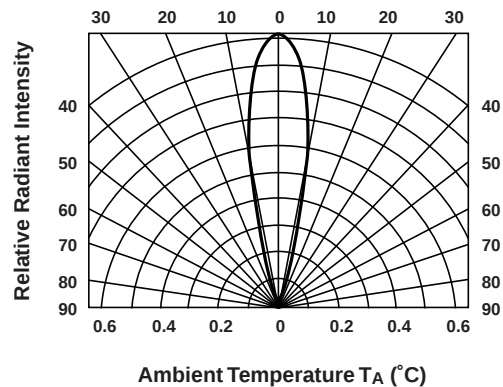
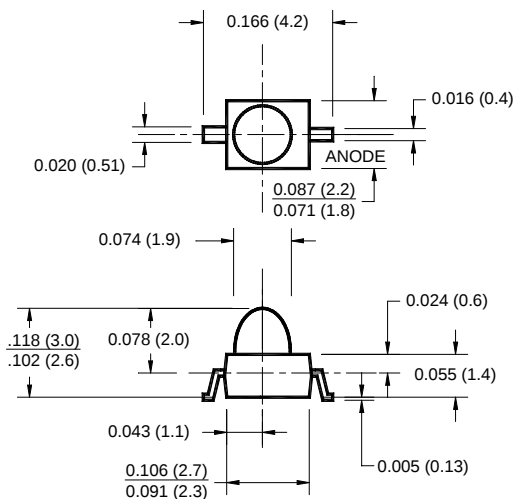


Fig. 6 Relative Radiant Intensity vs. Angular Displacement



GULL WING LEAD CONFIGURATION



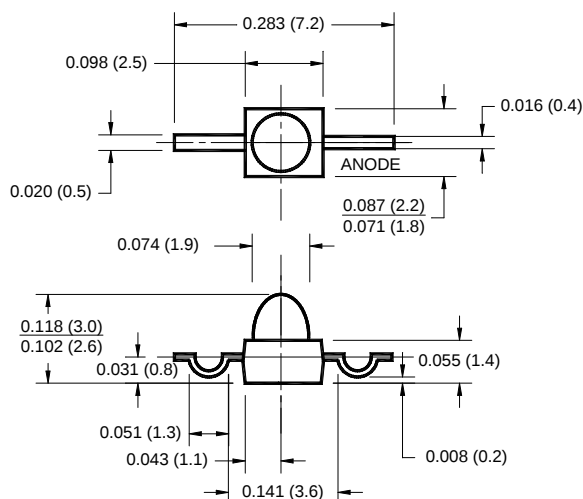
FEATURES

- Three lead forming options: Gull Wing, Yoke and Z-Bend
- Compatible with automatic placement equipment
- Supplied on tape and reel or in bulk packaging
- Compatible with vapor phase reflow solder processes

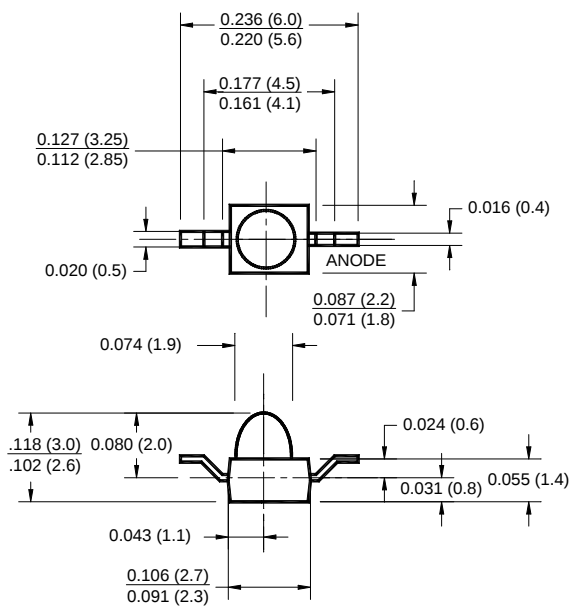
NOTES: (Applies to all package drawings)

1. Dimensions are in inches (mm).
2. Tolerance of $\pm .010$ (.25) on all non nominal dimensions unless otherwise specified.

YOKE LEAD CONFIGURATION



Z-BEND LEAD CONFIGURATION



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