

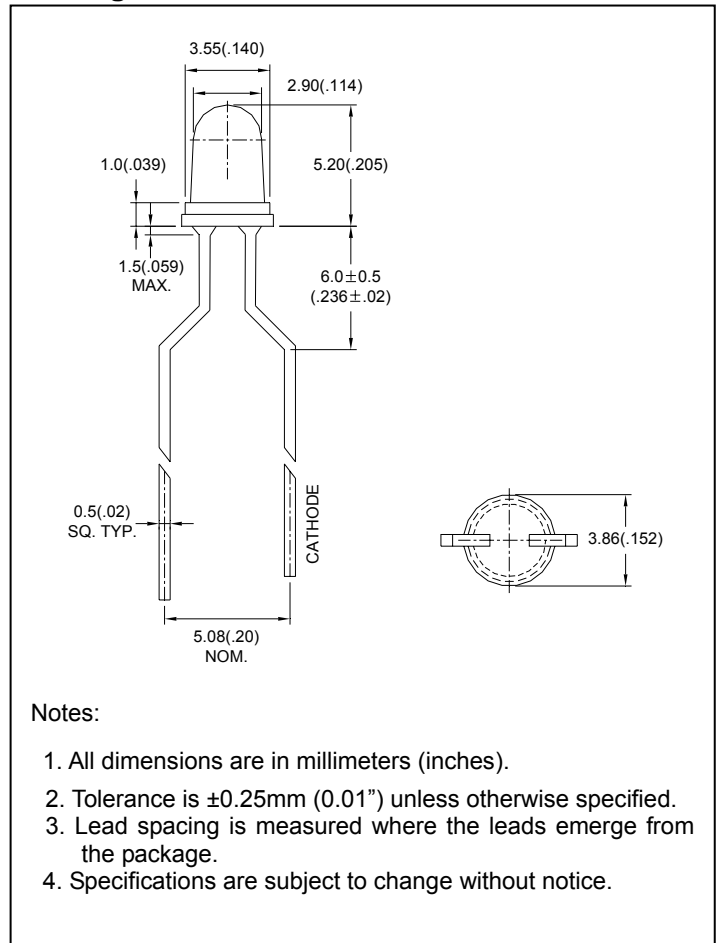
### ● Features:

1. Chip material: AllnGaP/GaAs
2. Emitted color : Super Red
3. Lens Appearance : Red diffused
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 3mm diameter package.
9. This product don't contained restriction substance, compliance ROHS standard.

### ● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

### ● Package dimensions:



### ● Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I <sub>F</sub>	30	mA
Peak Forward Current* <sup>1</sup>	I <sub>FP</sub>	150	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	Topr	-40°C~80°C	
Storage Temperature	Tstg	-40°C~85°C	
Soldering Temperature	Tsol	260°C (for 5 seconds)	

\*<sup>1</sup>Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width.

### Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20mA$	-	2.0	2.6	V
Luminous Intensity	$I_v$	$I_F=20mA$	-	170	-	mcd
Reverse Current	$I_R$	$V_R=5V$	-	-	100	$\mu A$
Peak Wave Length	$\lambda_p$	$I_F=20mA$	-	645	-	nm
Dominant Wave Length	$\lambda_d$	$I_F=20mA$	627	-	637	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	22	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	35	-	deg

### Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

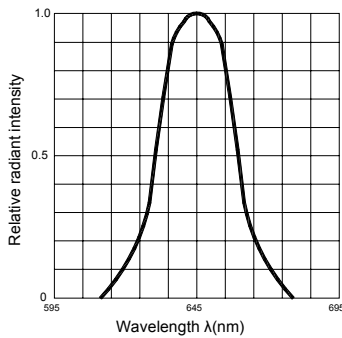


Fig.2 Forward current derating curve vs. Ambient temperature

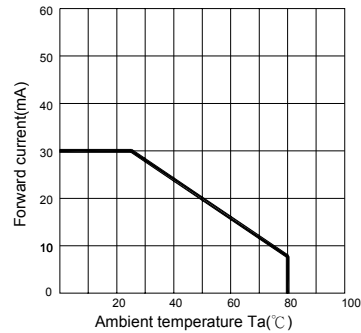


Fig.3 Forward current vs. Forward voltage

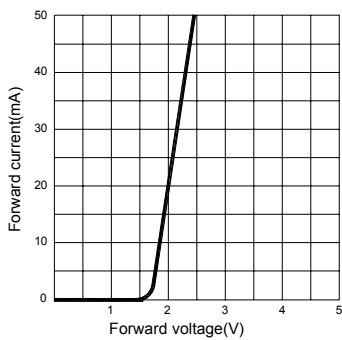


Fig.4 Relative luminous intensity vs. Ambient temperature

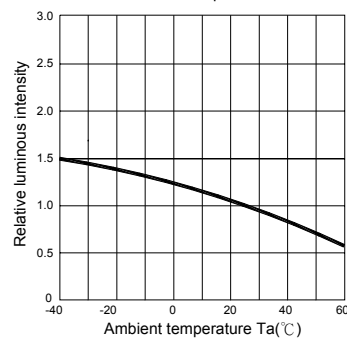


Fig.5 Relative luminous intensity vs. Forward current

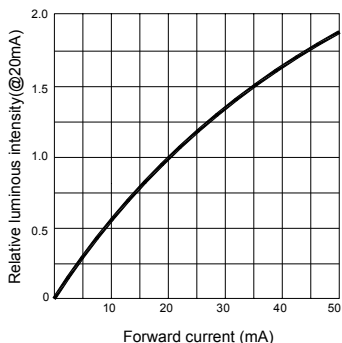
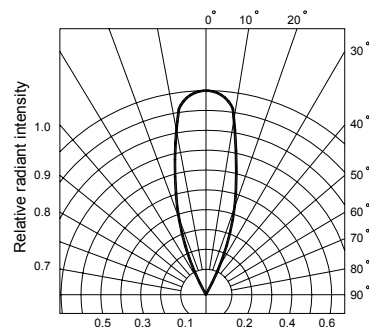
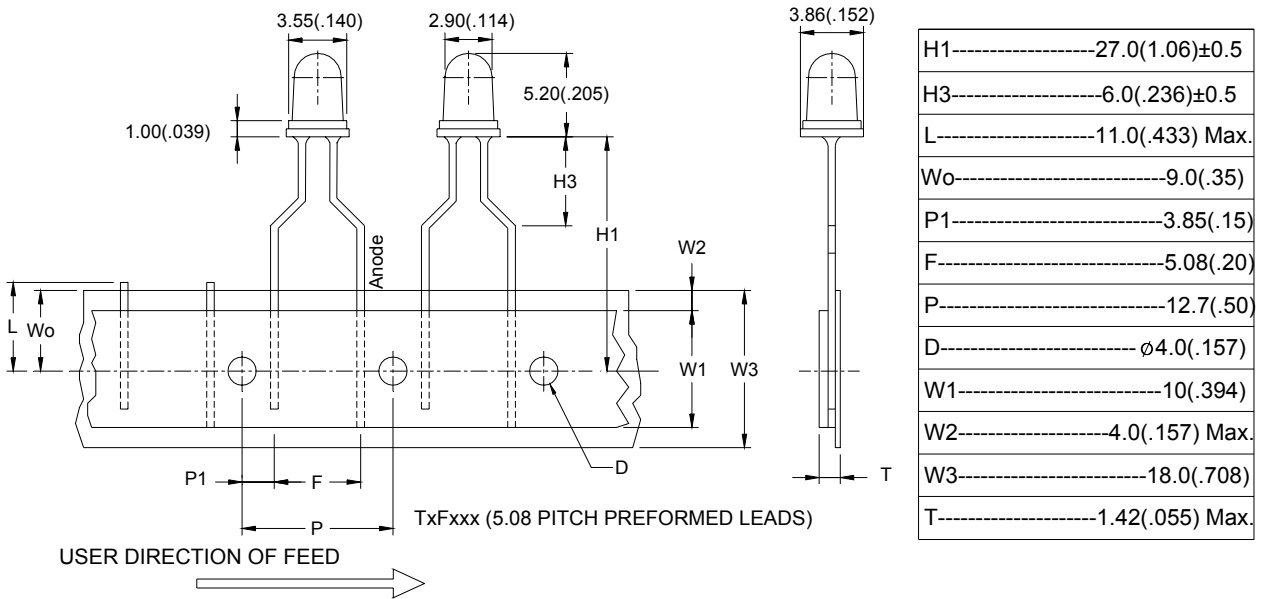


Fig.6 Radiation diagram



### ● Tapping and packaging specifications(Units: mm)



- Notes: 1.All dimensions are in millimeter (inch).  
 2.Tolerance is ±0.25mm (0.01") unless otherwise specified.  
 3.Lead spacing is measured where the leads emerge from the package.

### ● Bin Limits

#### 1. Intensity Bin Limits (At $I_F = 20\text{mA}$ )

Bin Code	Min. (mcd)	Max. (mcd)
:	:	:
P	55	110
Q	82	160
R	120	240
S	180	360
T	280	550
:	:	:

● Bin : x

↑  
Intensity bin code