

DATA SHEET

● DEVICE NUMBER : BL-B4534-TBS22A

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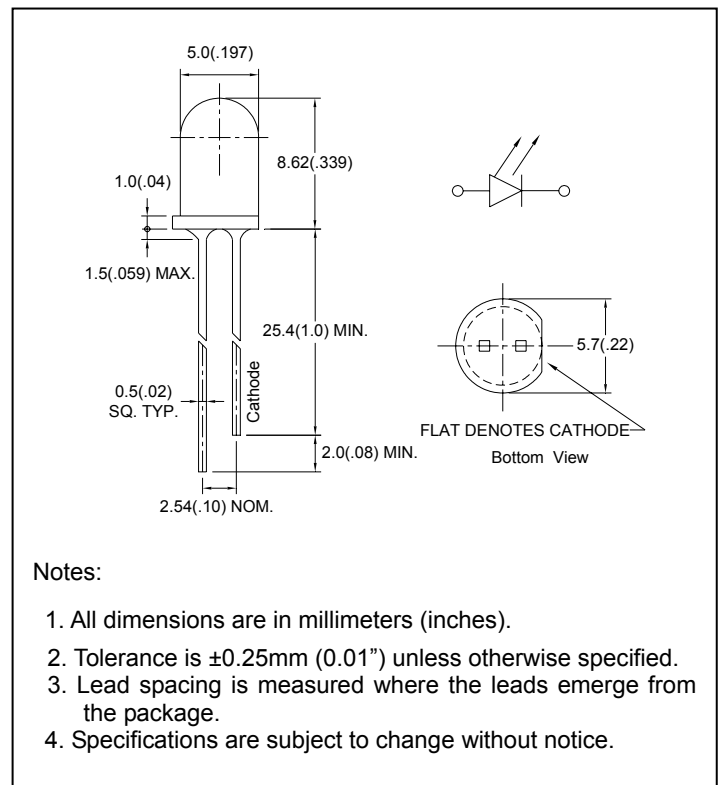
● Features:

1. Chip material: GaAsP/GaP
2. Emitted color : Hi-Eff 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. 5mm 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 _F	30	mA
Peak Forward Current	I _{FP}	150	mA
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-40°C~85°C	
Storage Temperature	T _{stg}	-40°C~100°C	
Soldering Temperature	T _{sol}	260°C max(for 5 seconds)	
Hand Soldering Temperature	T _{sol}	350°C max(for 3 seconds)	

*1 Condition for I_{FP} 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	$I_F=20\text{mA}$	-	2.0	2.6	-
Luminous Intensity	I_v	$I_F=20\text{mA}$	-	65	-	-
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	-
Peak Wave Length	λ_p	$I_F=20\text{mA}$	-	640	-	-
Dominant Wave Length	λ_d	$I_F=20\text{mA}$	617	-	638	617
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	-	35	-	-
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	35	-	-

Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

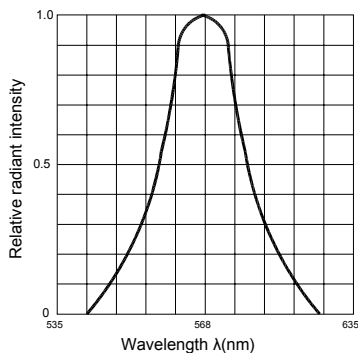


Fig.2 Forward current derating curve vs. Ambient temperature

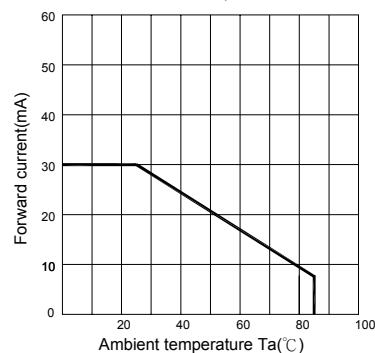


Fig.3 Forward current vs. Forward voltage

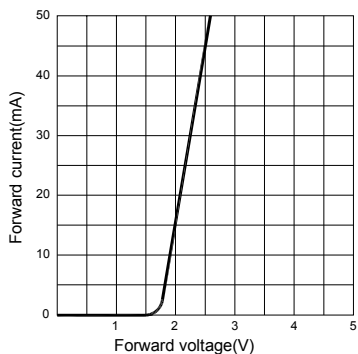


Fig.4 Relative luminous intensity vs. Ambient temperature

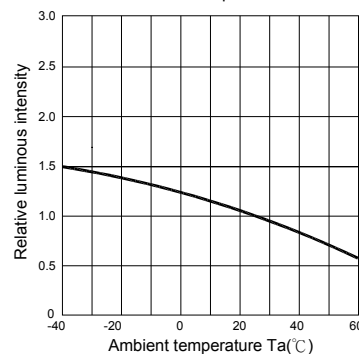


Fig.5 Relative luminous intensity vs. Forward current

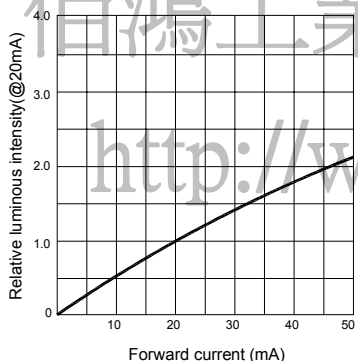
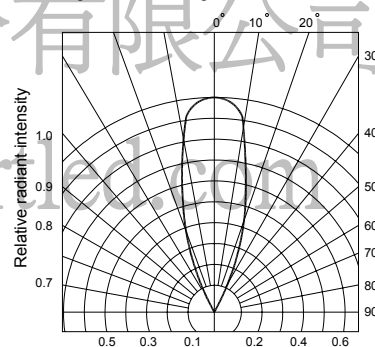
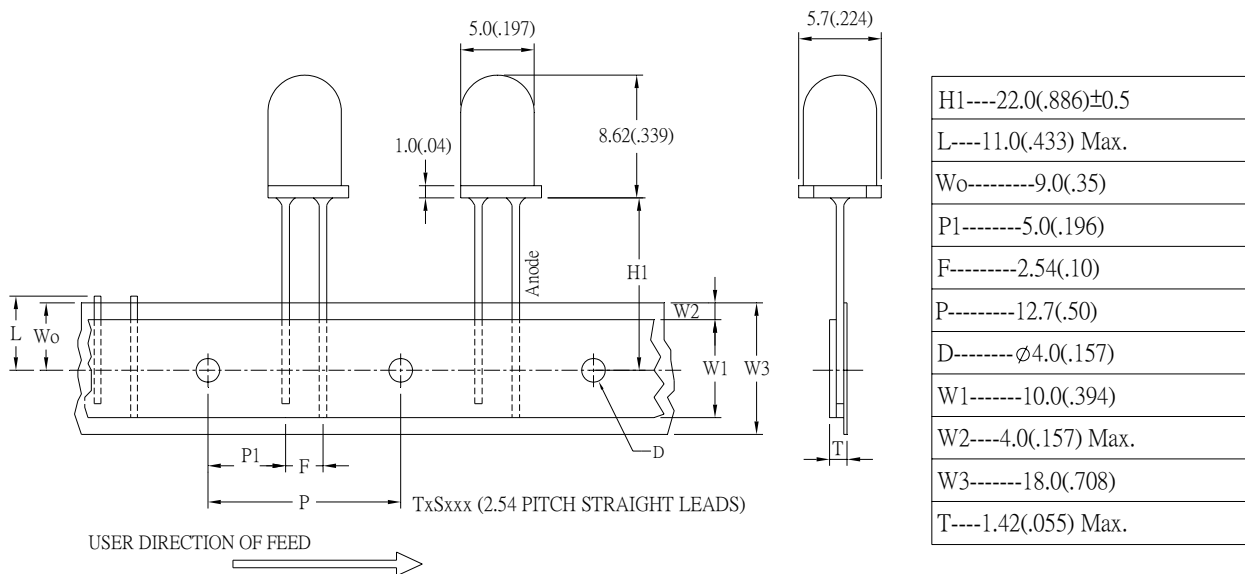


Fig.6 Radiation diagram



● 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)
M	28	42
N	42	63
P	63	94
Q	94	140
R	140	210

● Bin : x

Intensity bin code

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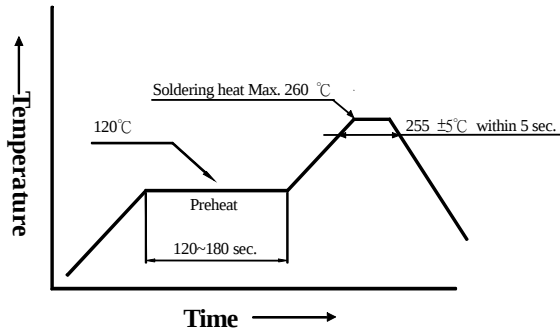
NOTES:1.Tolerance of measurement of luminous intensity. :±15%

●DIP soldering (Wave Soldering)

Preheating : 120°C ,within 120~180 sec.

Operation heating : 255°C $\pm$ 5°C within 5 sec.260°C (Max)

Gradual Cooling (Avoid quenching).



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