



## B3B-446-30

- Light Emitting Diode
- 660 nm, 2.1 cd
- GaAIAs structure
- 3 mm epoxy package



### Description

**B3B-446-30** is a **GaAIAs** red LED. It has a luminous intensity of typ. 2.1 cd, and comes in a hermetically sealed clear 3 mm epoxy package.

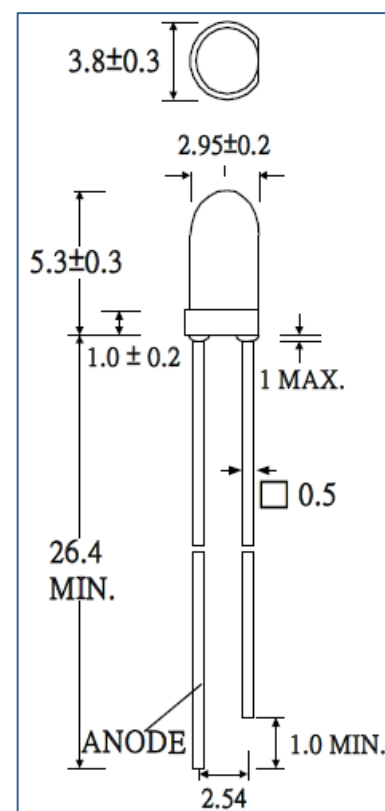
### Maximum Rating ( $T_{CASE} = 25^{\circ}C$ )

Parameter	Symbol	Values		Unit
		Min.	Max.	
Power Dissipation, DC	$P_D$		60	mW
Pulse Forward Current*	$I_{FP}$		50	mA
Reverse Voltage	$V_R$		5.0	V
Operating Temperature	$T_{OPR}$	- 40	+ 85	$^{\circ}C$
Storage Temperature	$T_{STG}$	- 40	+ 85	$^{\circ}C$
Soldering Temperature (max 3s)	$T_{SOL}$		+ 260	$^{\circ}C$

\* Duty cycle = 10% @ 1 kHz

### Electro-Optical Characteristics ( $T_{CASE} = 25^{\circ}C$ , $I_F = 20$ mA)

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Peak Wavelength	$\lambda_P$		660		nm
Dominant Wavelength	$\lambda_D$		645		nm
Half Width	$\Delta\lambda$		25		nm
Forward Voltage	$V_F$		1.9	2.4	V
Reverse Current ( $V_R = 5$ V)	$V_R$			10	$\mu A$
Luminous Intensity	$I_v$	1.86		2.42	cd
Viewing Angle	$2\theta_{1/2}$		20		deg.



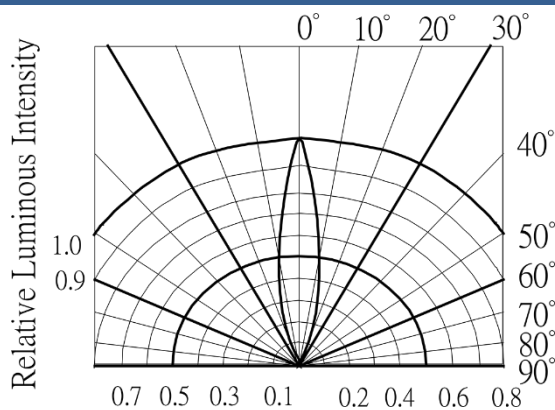
All dimensions in mm



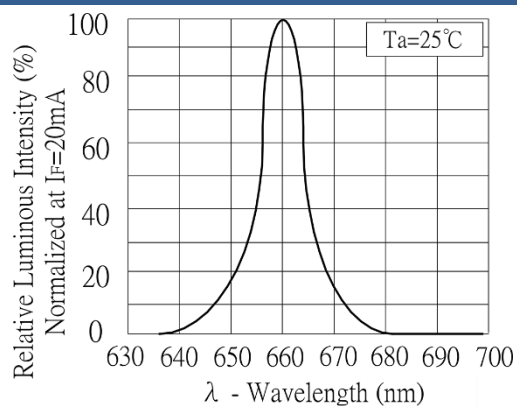


## Performance Characteristics

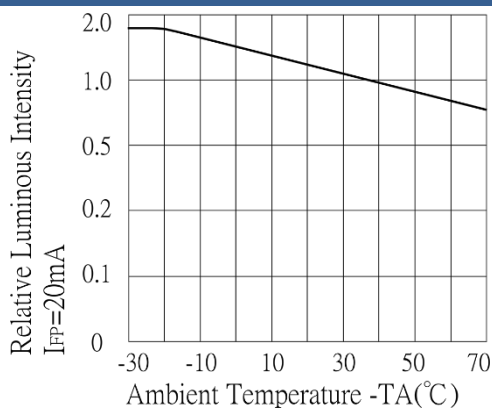
### Radiation Diagram



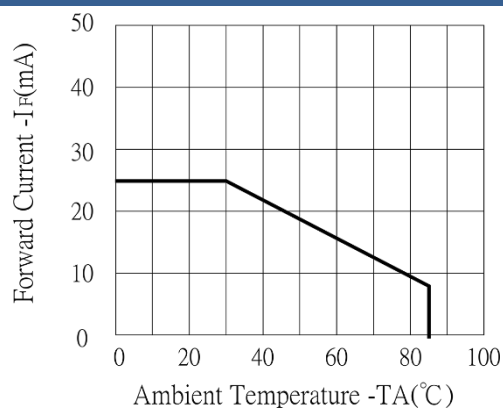
### Relative Luminous Intensity vs. Wavelength



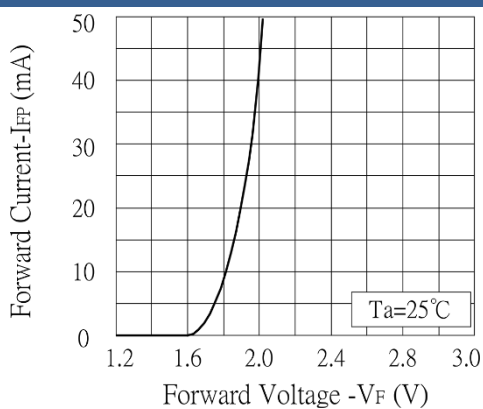
### Luminous Intensity vs. Ambient Temp.



### Allowable Forward Current vs. Ambient Temp.



### Forward Current vs. Forward Voltage



### Luminous Intensity vs. Forward Current

