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AUSTRIA



IB5-43B8-765

- Infrared Light Emitting Diode
- 765 nm, 150 mW/sr
- GaAIAs structure
- 5 mm epoxy package



Description



IB5-43B8-765 is an **GaAIAs** based IR LED, typically emitting at 765 nm with a luminous intensity of 150 mW/sr. It comes in a hermetically sealed clear 5 mm epoxy resin.

Maximum Ratings*

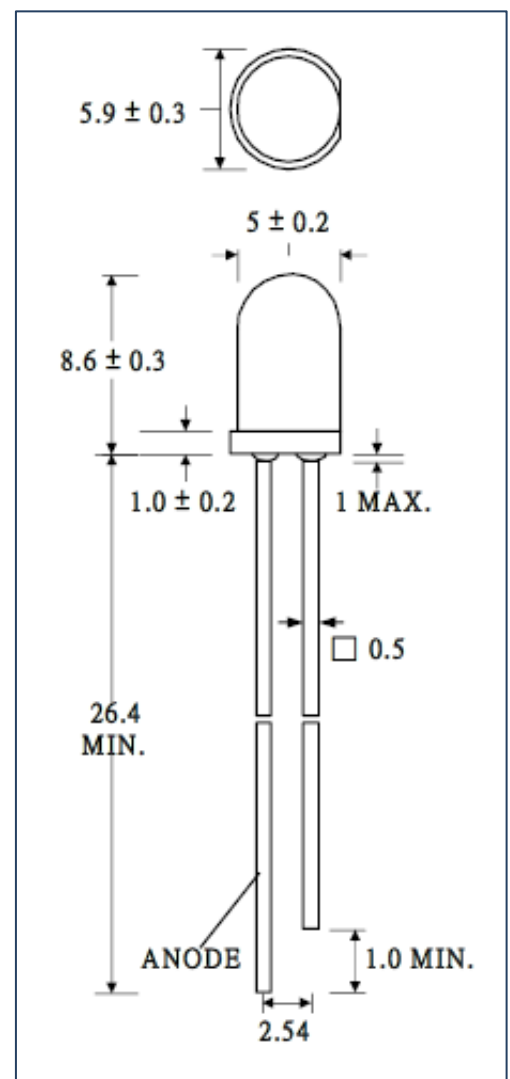
Parameter	Symbol	Values		Unit
		Min.	Max.	
Power Dissipation, DC	P_D		95	mW
Pulse Forward Current**	I_{FP}		100	mA
Reverse Voltage	V_R		5.0	V
Operating Temperature	T_{OPR}	- 40	+ 85	°C
Storage Temperature	T_{STG}	- 40	+ 85	°C
Soldering Temperature (t_{max} = 3s)	T_{SOL}		+ 260	°C

* Operating close to or exceeding these parameters may damage the device

** duty cycle = 10 % @ 1 kHz

Electro-Optical Characteristics ($T_{CASE} = 25^\circ\text{C}$)

Parameter	Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Peak Wavelength	$I_F = 20\text{mA}$	λ_P		765		nm
Spectral Width (FWHM)	$I_F = 20\text{mA}$	$\Delta\lambda$		30		nm
Forward Voltage	$I_F = 20\text{mA}$	V_F		1.6	1.9	V
Reverse Current	$V_R = 5\text{V}$	V_R			10	μA
Radiated Output Power	$I_F = 20\text{mA}$	I_R	100	150		mW/
Viewing Half Angle	$I_F = 20\text{mA}$	$\Theta_{1/2}$		15		deg.
Rise / Fall Time	$I_F = 50\text{mA}$	T_r/t_f		10		ns

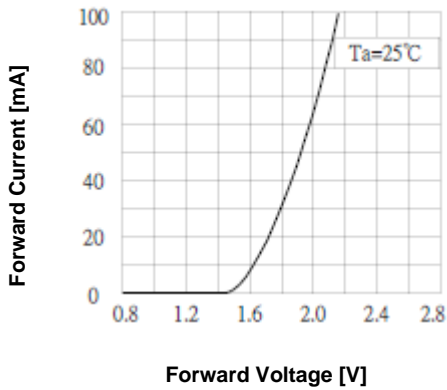


All dimensions in mm

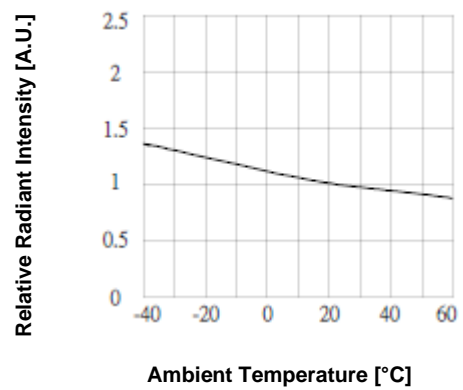


Typical Performance Curves

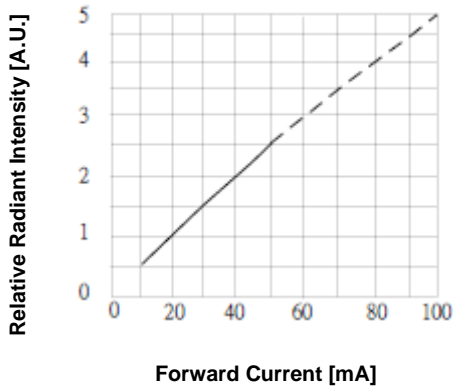
Forward Current vs. Forward Voltage



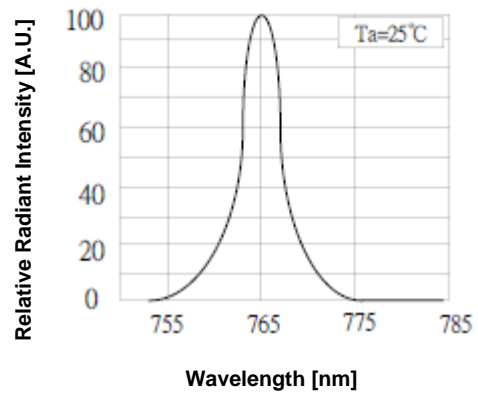
Relative Radiant Intensity vs. Ambient Temperature



Relative Radiant Intensity vs. Forward Current



Relative Spectral Emission



Radiation Characteristics

