



B5B-433-B505



TECHNICAL DATA

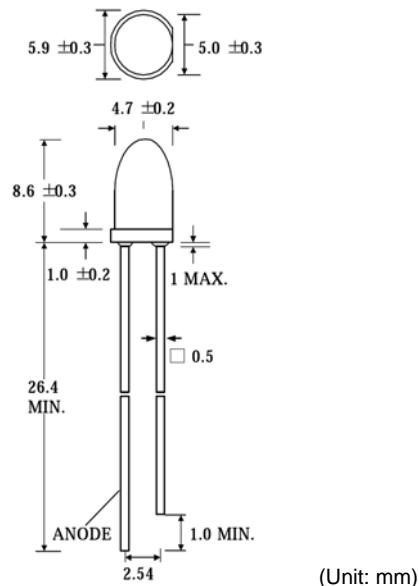
LED, 5 mm

InGaN

B5B-433-B505 is a InGaN LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a band of green light with a peak at 507 nm.

Specifications

- Structure: InGaN
- Peak Wavelength: typ. 507 nm
- Optical Output Power: typ. 10.8 cd
- Package: 5 mm clear epoxy



Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Power Dissipation	P_D	120	mW
Forward Current	I_F	30	mA
Pulse Forward Current ^{*1}	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-40 ... +85	°C
Storage Temperature	T_{stg}	-40 ... +100	°C
Soldering Temperature ^{*2}	T_{sol}	260	°C

^{*1} 1/10 duty cycle @ 1 KHz

^{*2} 1.6mm from body, must be completed within 3 seconds

Electro-Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20 \text{ mA}$	-	3.2	3.8	V
Reverse Current	I_R	$V_R = 5 \text{ V}$	-	-	10	μA
Luminous Intensity	I_V	$I_F = 20 \text{ mA}$	7.2	10.8	-	mcd
Peak Wavelength	λ_P	$I_F = 20 \text{ mA}$	-	507	-	nm
Dominant Wavelength	λ_D	$I_F = 20 \text{ mA}$	-	505	-	nm
Half Width	$\Delta\lambda$	$I_F = 20 \text{ mA}$	-	30	-	nm
Viewing Angle *	$2\Theta_{1/2}$	$I_F = 20 \text{ mA}$	-	8	-	deg.

* Tolerance: -10 / +5 deg.

Notes

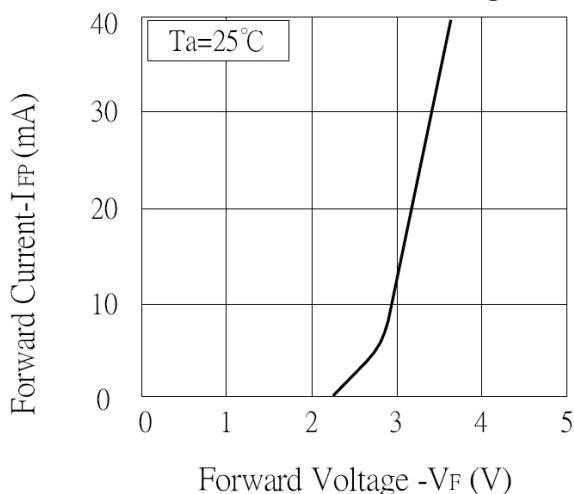
- Do not view directly into the emitting area of the LED during operation!
- The above specifications are for reference purpose only and subjected to change without prior notice.



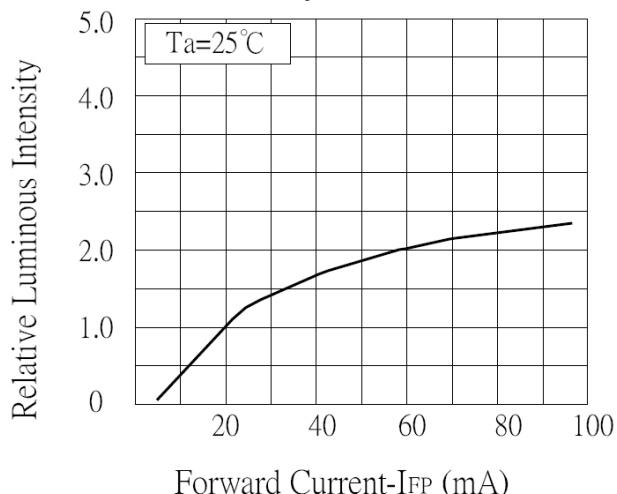


Typical Performance Curves

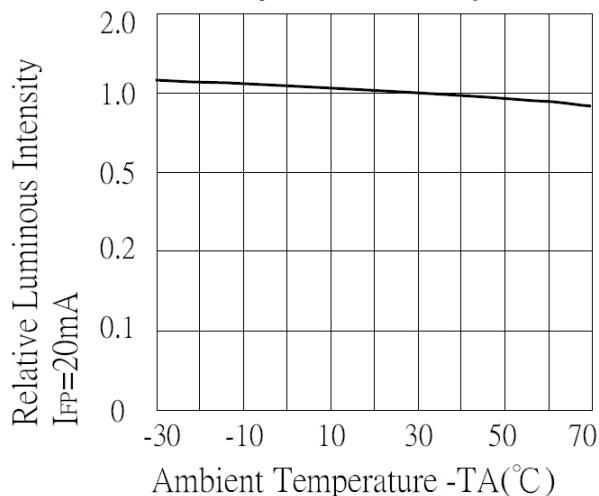
Forward Current – Forward Voltage



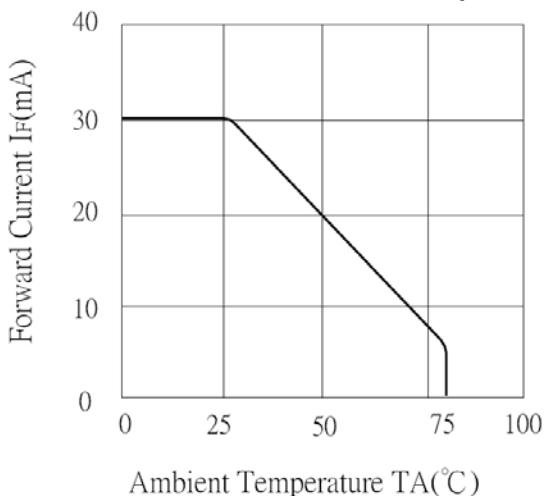
Luminous Intensity –Forward Current



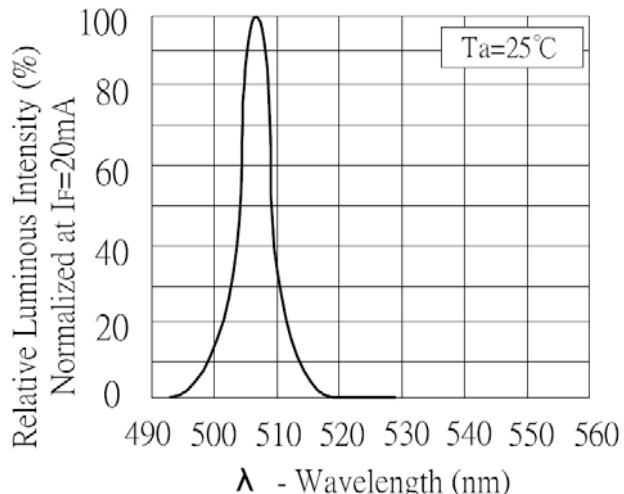
Luminous Intensity – Ambient Temperature



Max. Forward Current – Ambient Temperature



Peak Wavelength



Radiation Diagram

