

L545-01

Pure Green LED

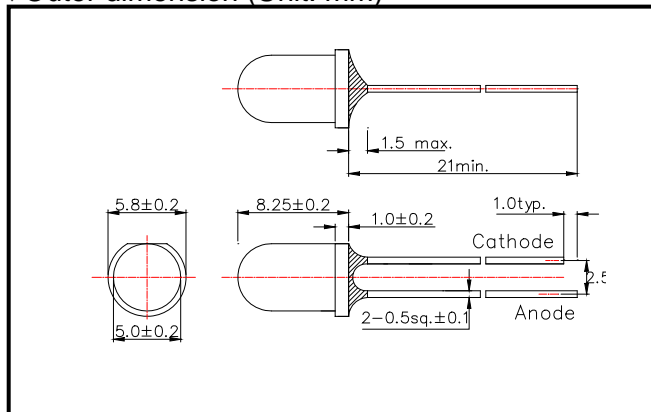
L545-01 is an InGaN LED mounted on a lead frame with a clear epoxy lens.

On forward bias it emits a spectral band of radiation, which peaks at 545nm.

◆ Specifications

1) Product Name	Pure Green LED
2) Type No.	L545-01
3) Chip	
(1) Chip Material	InGaN
(2) Peak Wavelength	545nm typ..
4) Package	
(1) Type	Φ5mm clear molding
(2) Resin Material	Epoxy Resin
(3) Lead Frame	Soldered(Lead Free)

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	180	mW	T _a =25°C
Forward Current	I _F	50	mA	T _a =25°C
Pulse Forward Current	I _{FP}	100	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Thermal Resistance	R _{thja}	330	K/W	
Junction Temperature	T _j	100	°C	
Operating Temperature	T _{OPR}	-40 ~ +85	°C	
Storage Temperature	T _{STG}	-40 ~ +100	°C	
Soldering Temperature	T _{SOL}	265	°C	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal resistance: junction – ambient, leads 7mm, soldered on PCB.

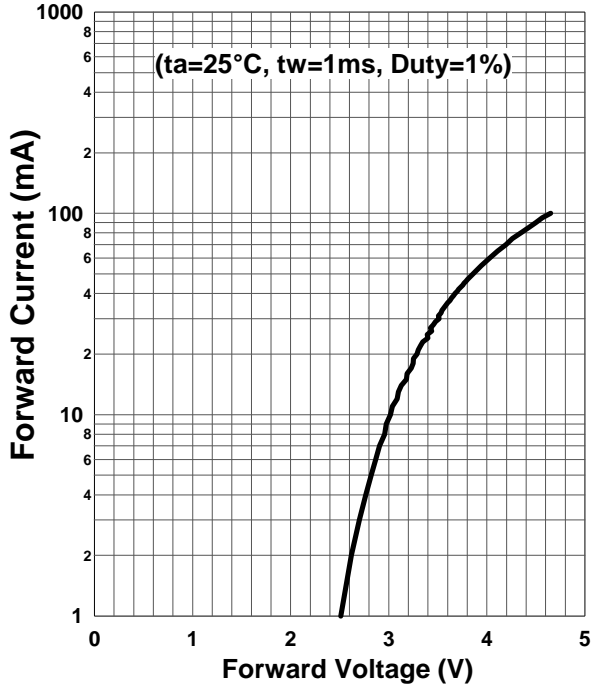
◆ Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		3.2		V
Radiated Power	P _O	I _F =20mA		2		mW
Radiant Intensity	I _E	I _F =20mA		9.3		mW/sr
Brightness	I _v	I _F =20mA		7000		mcd
Peak Wavelength	λ _P	I _F =20mA	535	545	555	nm
Half Width	Δλ	I _F =20mA		36		nm
Dominant Wavelength	λ _D	I _F =20mA		558		nm
Viewing Half Angle	θ 1/2	I _F =20mA		±8		deg.

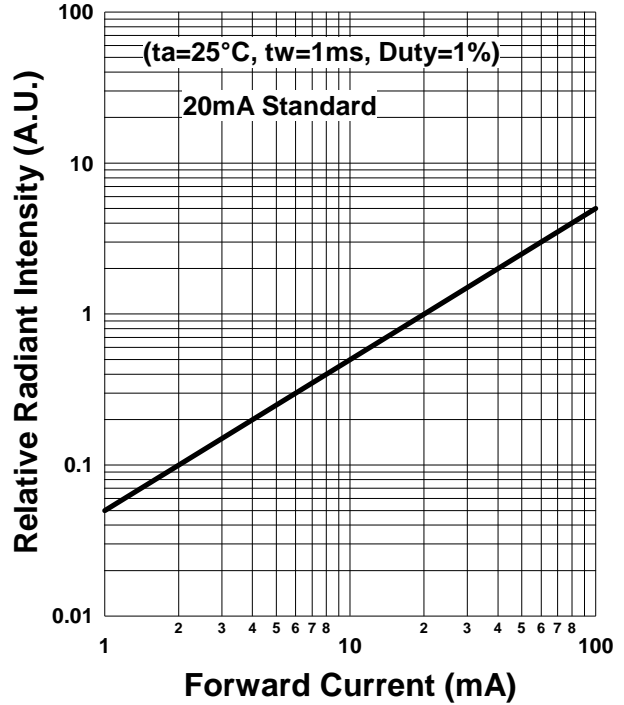
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by Tektronix J-6512.

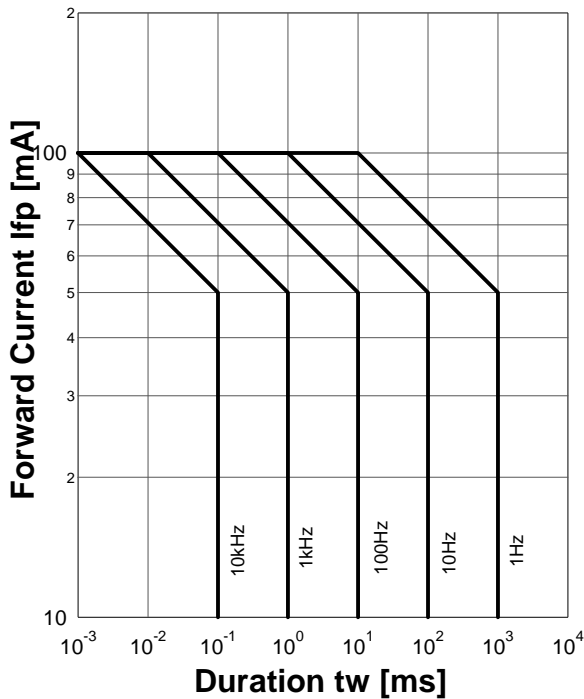
Forward Current - Forward Voltage



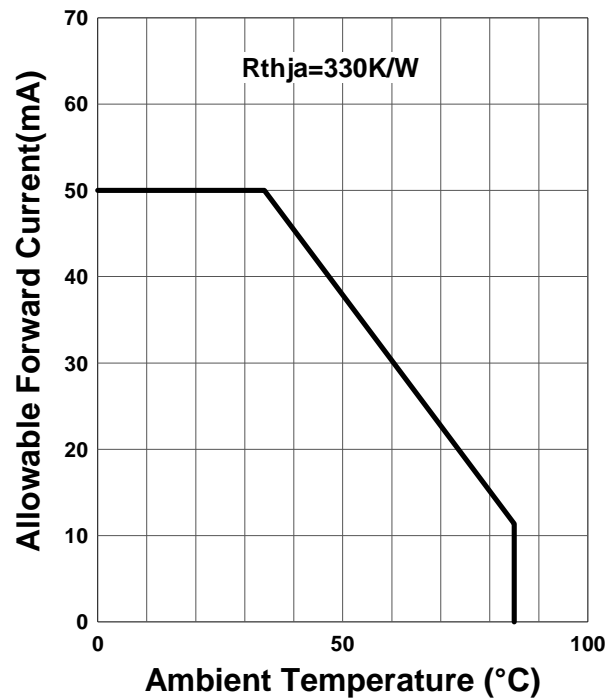
Relative Radiant Intensity - Forward Current



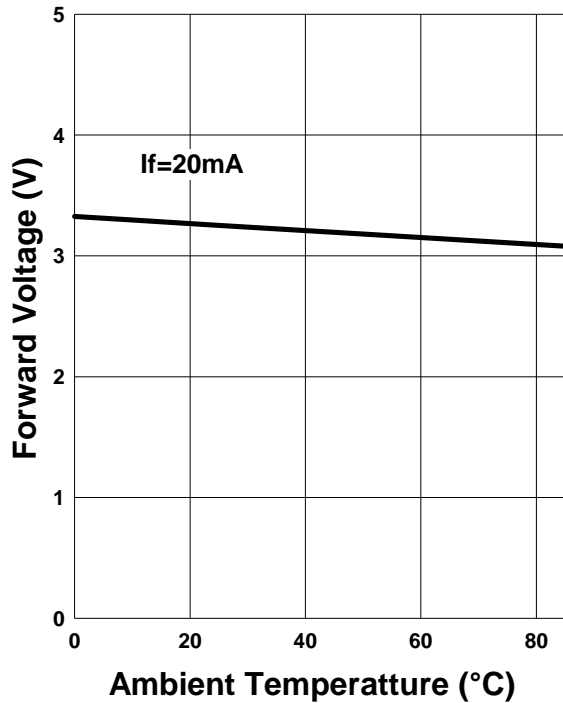
Forward Current - Pulse Duration



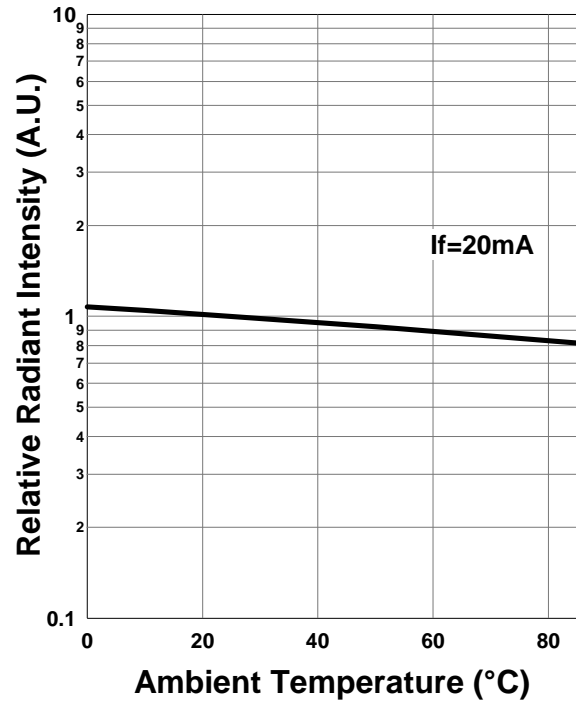
Allowable Forward Current - Ambient Temperature



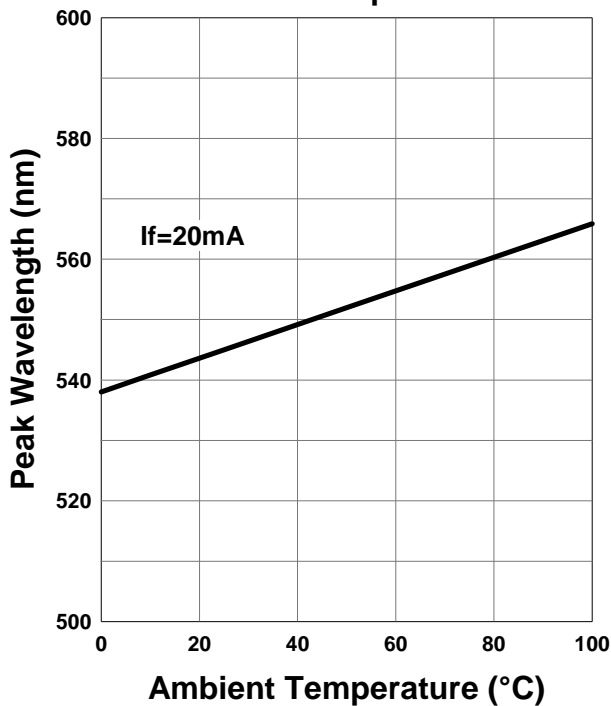
Forward Voltage - Ambient Temperature



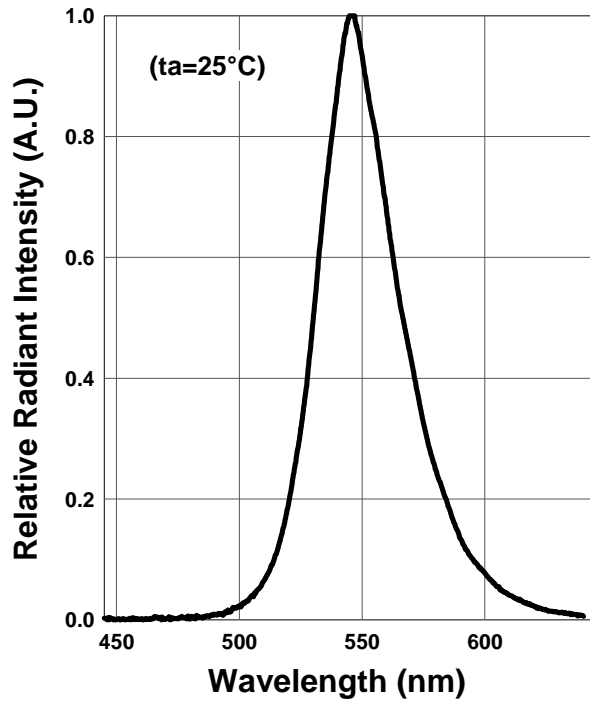
Relative Radiant Intensity - Ambient Temperature



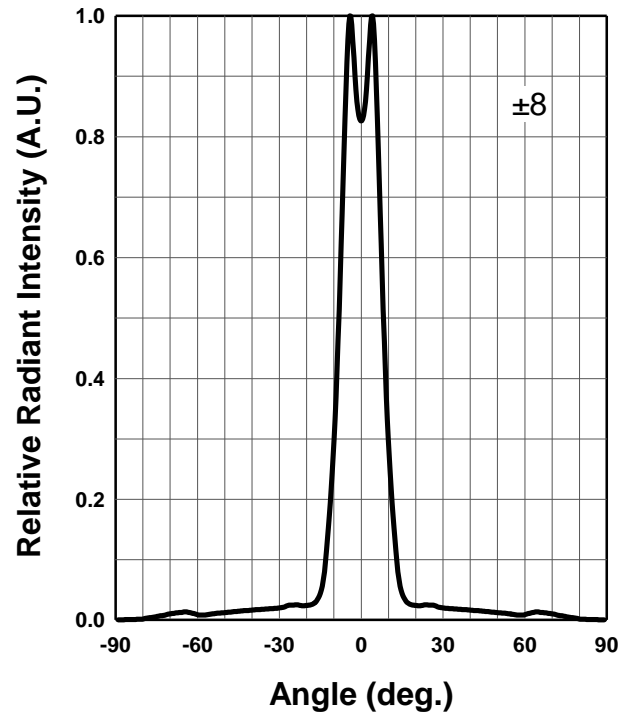
Peak Wavelength - Ambient Temperature



Relative Spectral Emission



Radiation Characteristics



Disclaimer

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Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

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