SMBB395V-1100

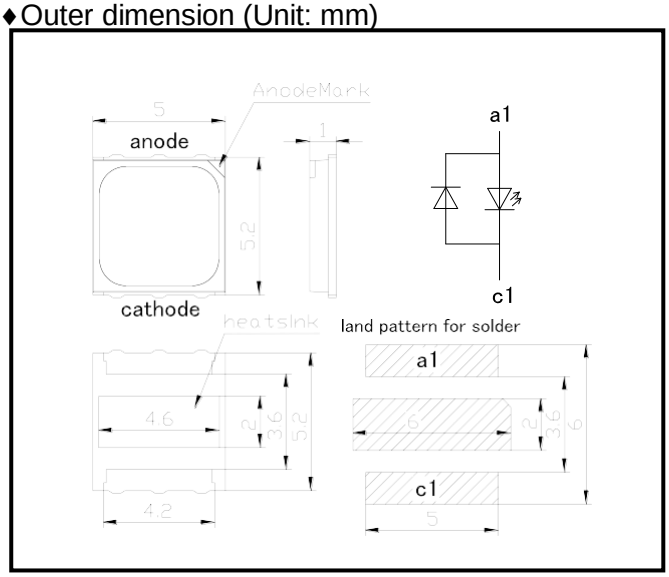
High Power Top LED

SMBB395V-1100 is an AlGaN LED mounted on UV resistant package with copper heat sink and is covered with silicone resin. On forward bias, it emits a band of 395nm.
It is 570mW typical of output power and ±62° of viewing half angle.

♦Specifications

1) Product Name	SMD UV LED
2) Type No.	SMBB395V-1100
3) Chip	
(1) Chip Material	AlGaN
(2) Chip Dimension	1000um*1000um
(3) Chip Number	1pce
(4) Peak Wavelength	395nm typ.
4) Package	
(1) Lead Frame Die	Silver Plated on Copper
(2) Package Resin	PPA Resin
(3) Lens	Silicone Resin

♦Outer dimension (Unit: mm)



♦Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	P_D	2500	mW
Forward Current	I_F	500	mA
Pulse Forward Current	I_{FP}	700	mA
Reverse Voltage	V_R	not designed for reverse operation	V
Thermal Resistance	R_{thja}	6	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}	250	°C

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.
‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C

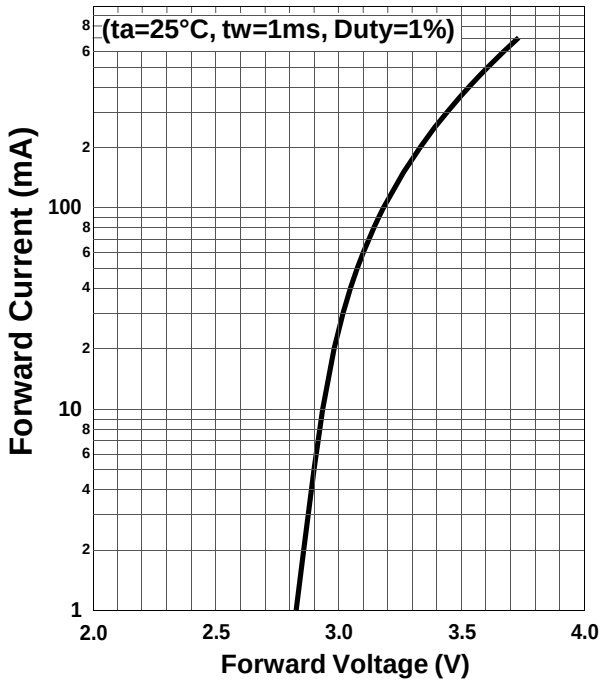
♦Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	IF=500mA		3.6		V
	V_{FP}	IFP=700mA		3.8		V
Radiated Power	P_O	IF=500mA		420		mW
		IFP=700A		570		
Peak Wavelength	λ_P	IF=50mA	385	395	405	nm
Half Width	$\Delta\lambda$	IF=50mA		14		nm
Viewing Half Angle	$\theta_{1/2}$	IF=50mA		±62		deg.
Rise Time	tr	IF=50mA		200		ns
Fall Time	tf	IF=50mA		150		ns

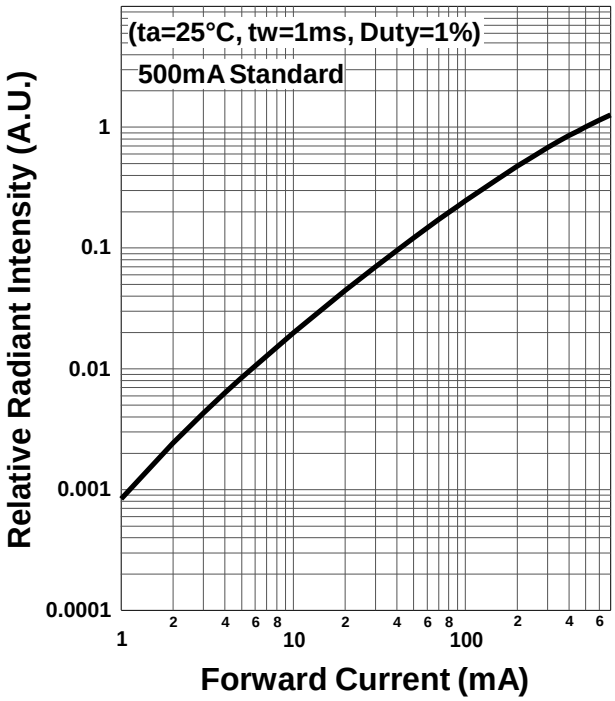
‡Radiated Power is measured by S3584-08.

Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054
408-330-0650 (Ext. 323), 408-330-0655 (Fax), sales@tech-led.com

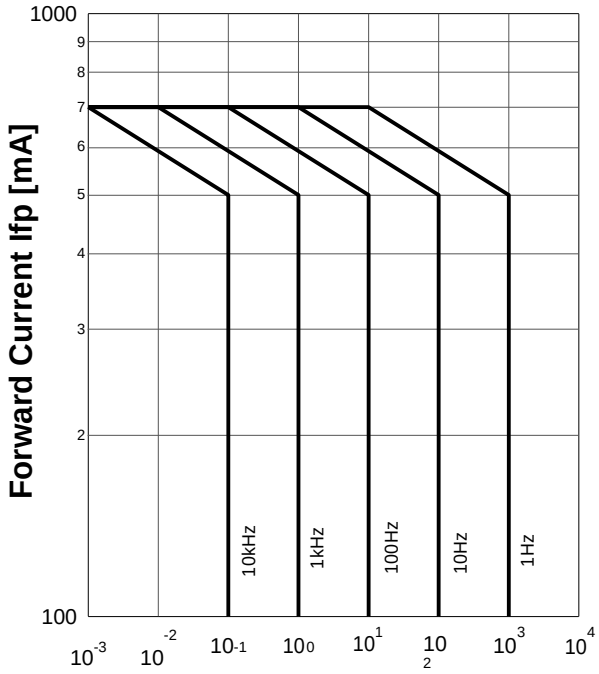
Forward Curent - Forward Voltage



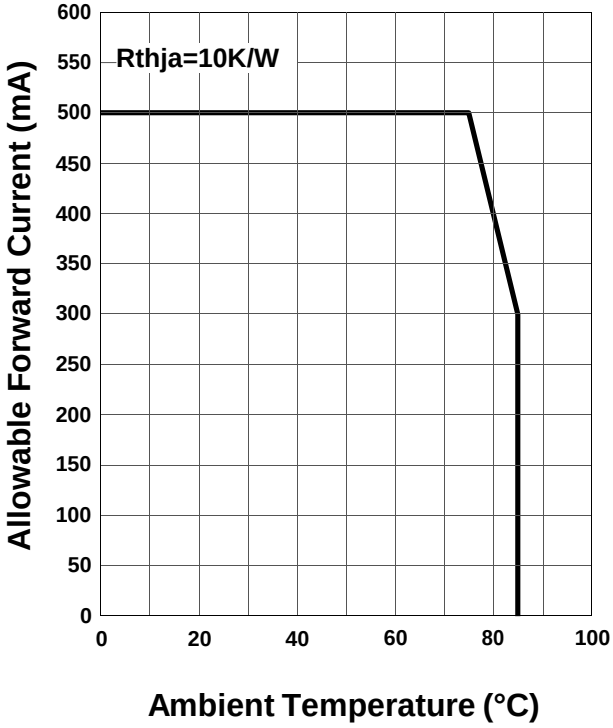
Relative Radiant Intensity - Forward Current



Forward Current - Pulse Duration

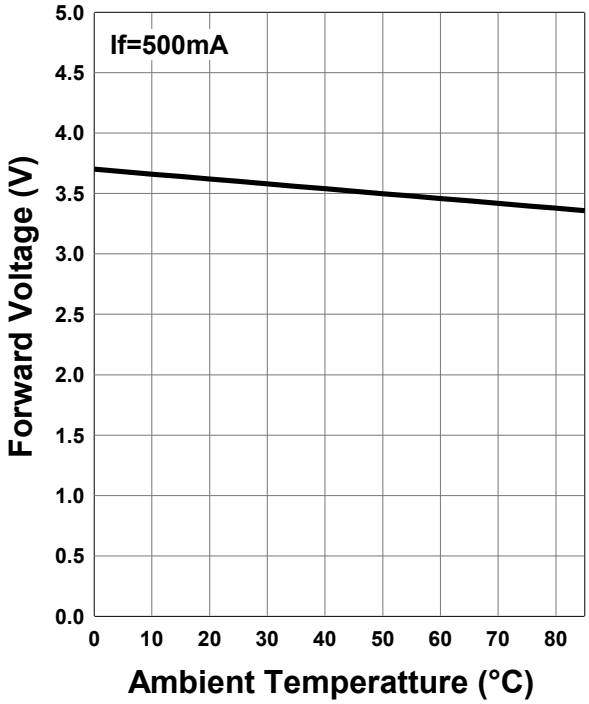


Allowable Forward Current - Ambient Temperature

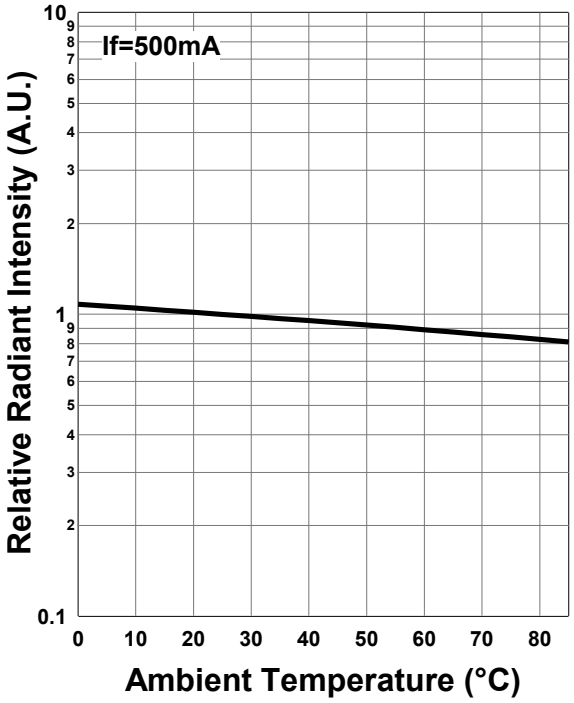


Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054
408-330-0650 (Ext. 323), 408-330-0655 (Fax), sales@tech-led.com

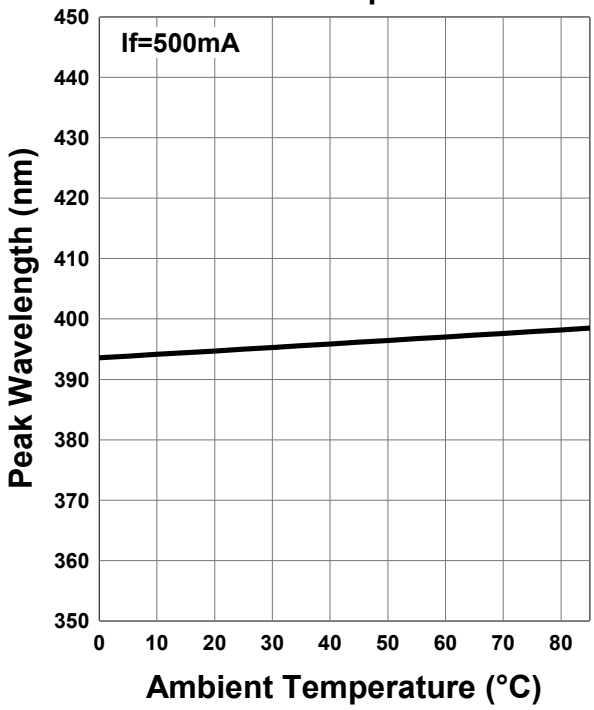
Forward Voltage - Ambient Temperture



Relative Radiant Intensity - Ambient Temperature

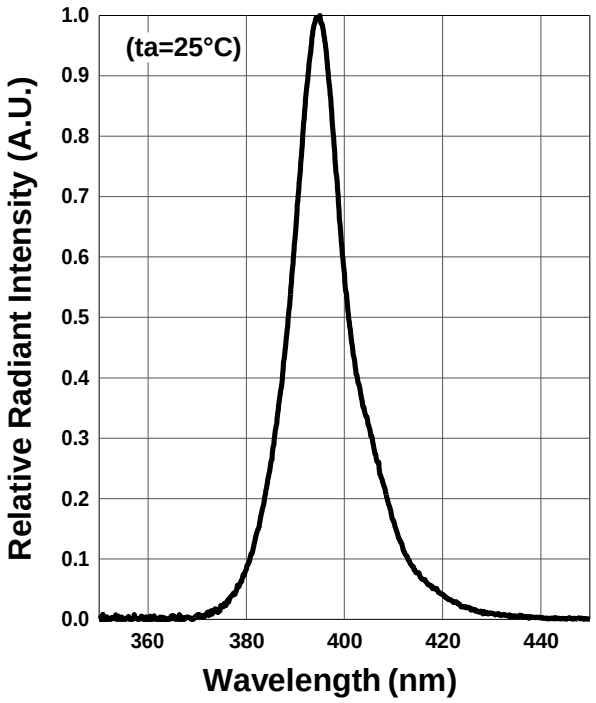


Peak Wavelength - Ambient Temperature

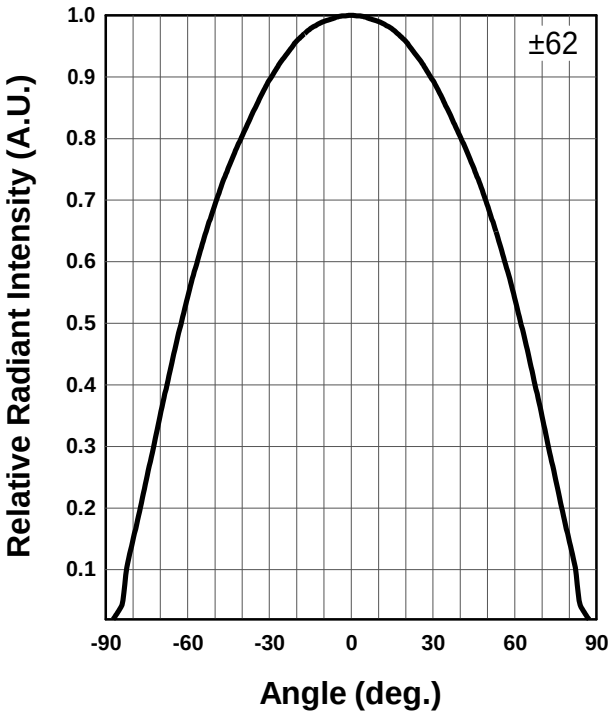


Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054
408-330-0650 (Ext. 323), 408-330-0655 (Fax), sales@tech-led.com

Relative Spectral Emission



Radiation Characteristics



Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054
408-330-0650 (Ext. 323), 408-330-0655 (Fax), sales@tech-led.com

Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

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.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054
408-330-0650 (Ext. 323), 408-330-0655 (Fax), sales@tech-led.com