

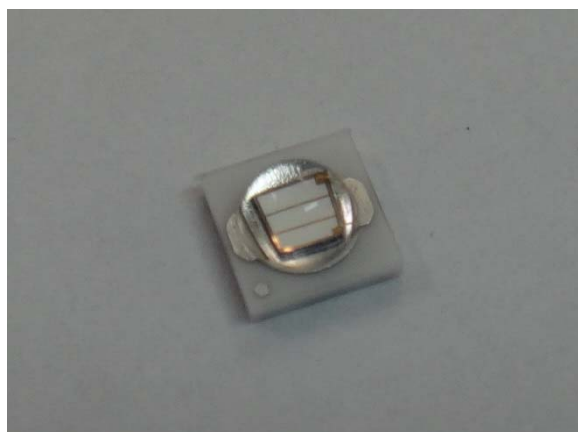
EDC405V-1100

High Power Top LED

EDC405V-1100 is an InGaN LED mounted on the 3.5*3.5 mm ceramics package. These devices are available to be operated and 1200mW at IFP=700mA.

◆ Specifications

- 1) Product Name High Power Top LED
- 2) Type No. EDC405V-1100
- 3) Chip
- (1) Chip Material InGaN
- (2) Chip Dimension 1000um*1000um
- (3) Chip Number 1pce
- (4) Peak Wavelength 405nm typ.
- 4) Package
- (1) Lead Frame Die Ceramics
- (2) Lens Silicone Resin



◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	2100	mW
Forward Current	IF	500	mA
Pulse Forward Current	IFP	700	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	10	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature	TSOL	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

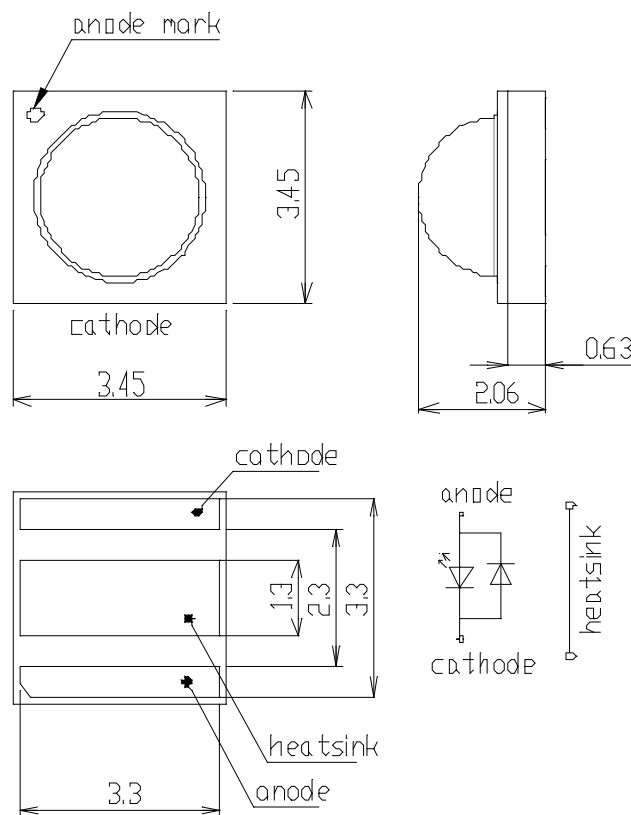
◆ Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =500mA		3.6	4.2	V
	V _{FP}	I _{FP} =700mA		3.8		
Radiated Power	P _O	I _F =500mA		900		mW
		I _{FP} =700mA		1200		
Peak Wavelength	λ _P	I _F =500mA	400	405	410	nm
Half Width	Δλ	I _F =500mA		12		nm
Viewing Half Angle	θ 1/2	I _F =100mA		±68		deg.
Rise Time	t _r	I _F =500mA		55		ns
Fall Time	t _f	I _F =500mA		75		ns

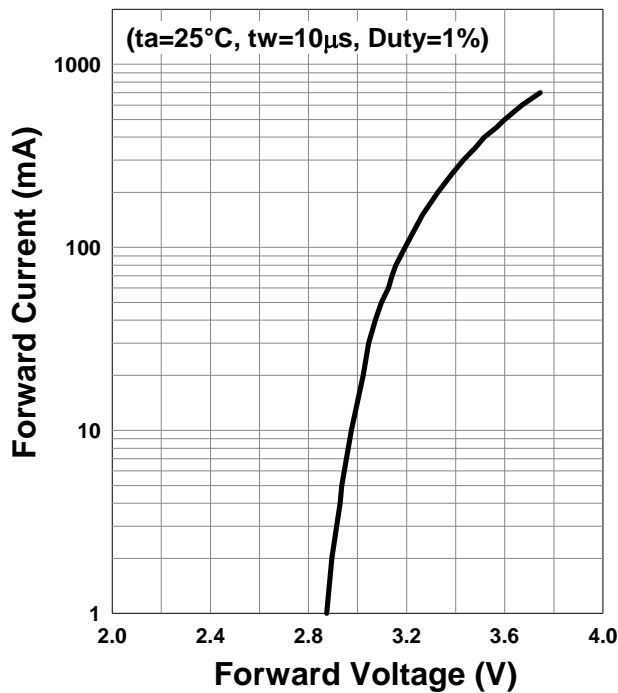
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE127-2700 Condition B.

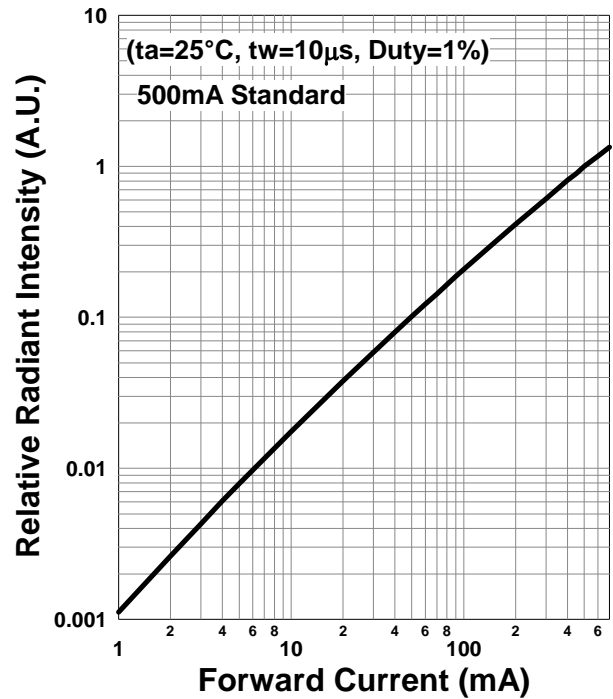
◆ Outer dimension (Unit: mm)



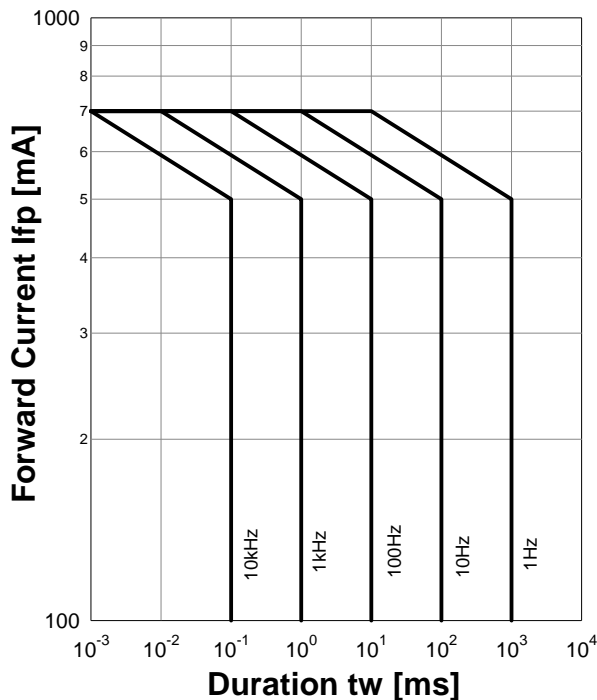
Forward Current - Forward Voltage



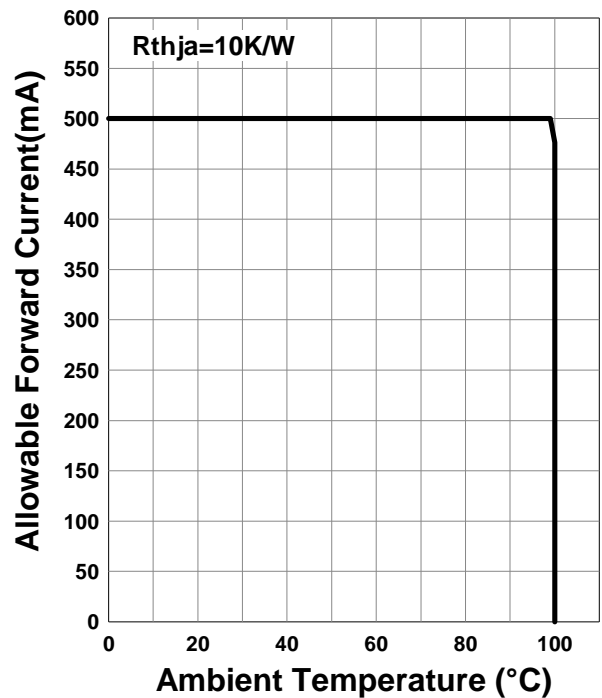
Relative Radiant Intensity - Forward Current



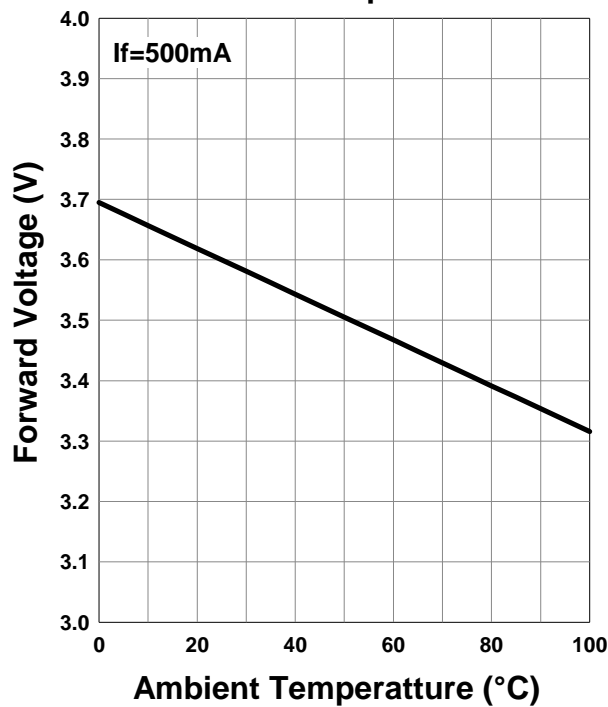
Forward Current - Pulse Duration



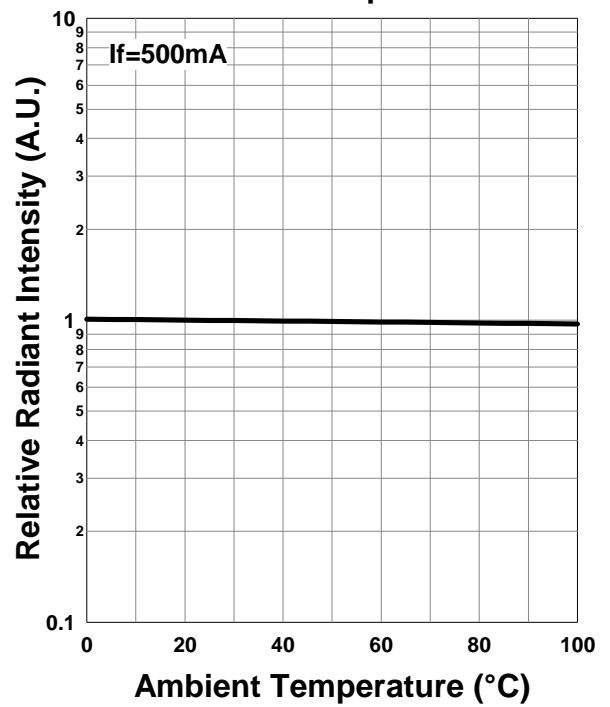
Allowable Forward Current - Ambient Temperature



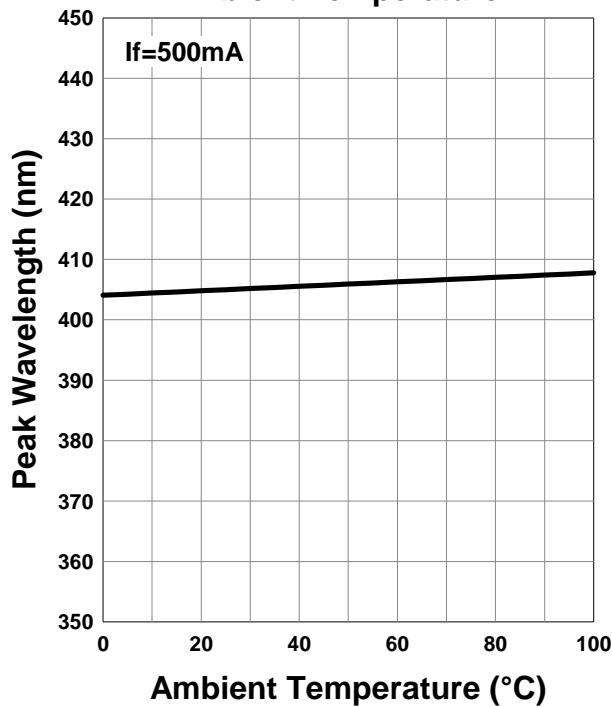
Forward Voltage - Ambient Temperature



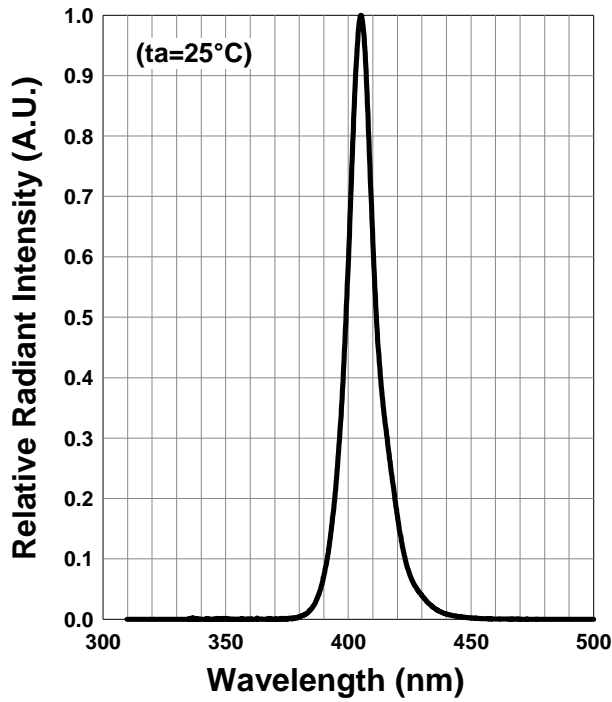
Relative Radiant Intensity - Ambient Temperature



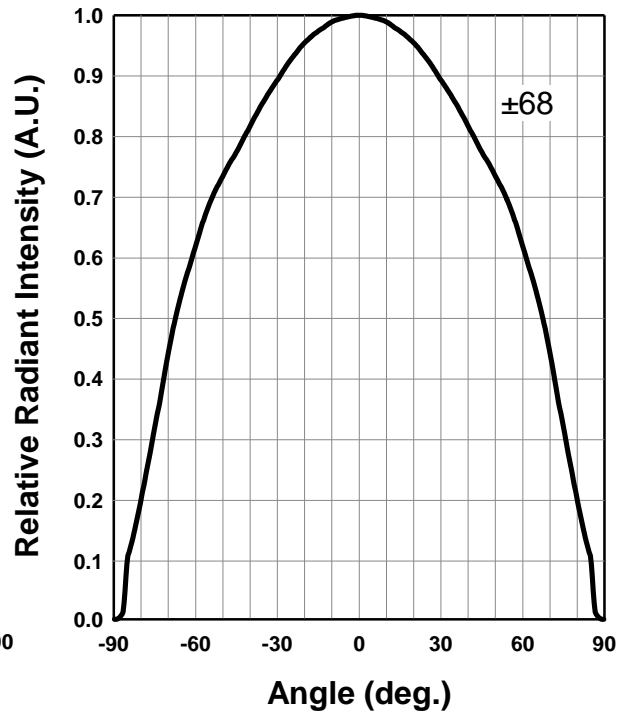
Peak Wavelength - Ambient Temperature



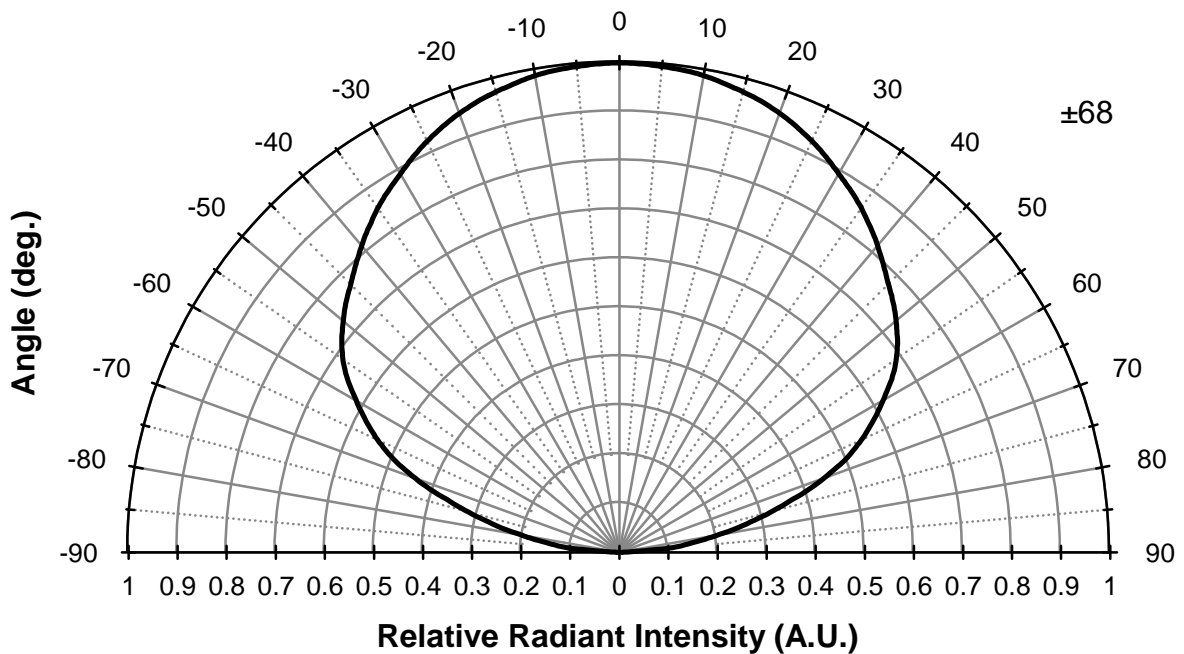
Relative Spectral Emission



Radiation Characteristics



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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