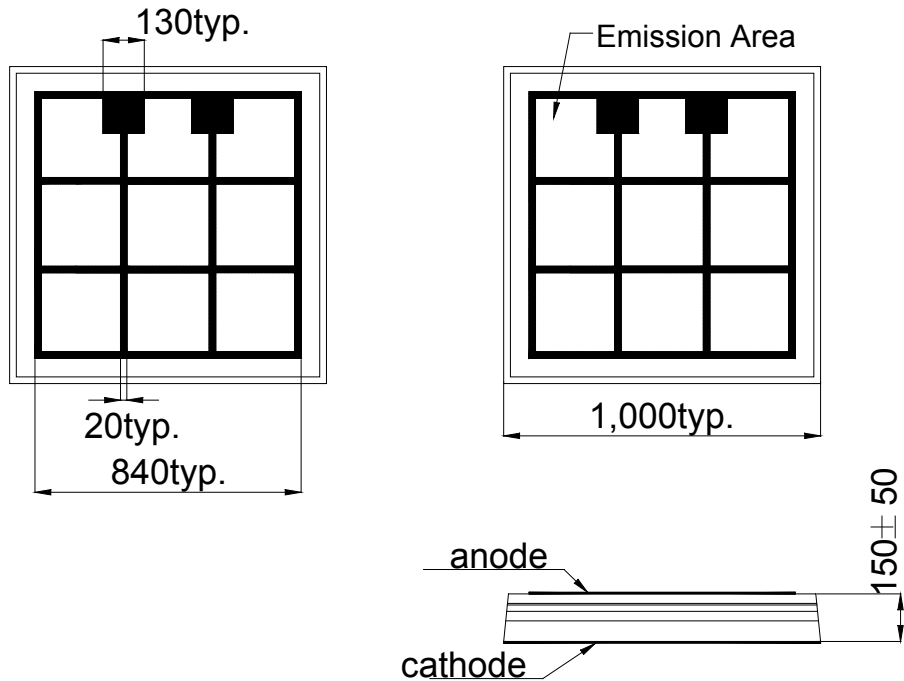


C970-100
GaAs IR LED Chip

Outline [Unit:μm]



<Characteristics>

- Materials: GaAs
- Size:
 - Chip Size: 1000μm x 1000μm
 - Chip Thickness: 150μm +/-50μm
 - P Bonding Pad: 130μm x 130μm
- Bonding Pad: Au Alloy
- Structure: Refer to drawing

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Forward Current	IF	600	mA
Pulse Forward Current	IFP	2000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +100	°C

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

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF1		1.4	1.7	V	IF=400mA tw=10ms
	VF2		1.5			IF=600mA tw=10ms
	VFP		2.1	4.0		IFP=2000mA
Total Radiated Power	PO1	0.55	0.7		mW	IF=20mA
	PO2		16			IF=400mA tw=10ms
	PO3		23			IF=600mA tw=10ms
	POp		71			IFP=2000mA
Peak Wavelength	λ_p	960		980	nm	IF=100mA
Half Width	$\Delta\lambda$		47		nm	IF=100mA
Rise Time	tr		200		ns	IF=400mA
Fall Time	tf		1000		ns	IF=400mA

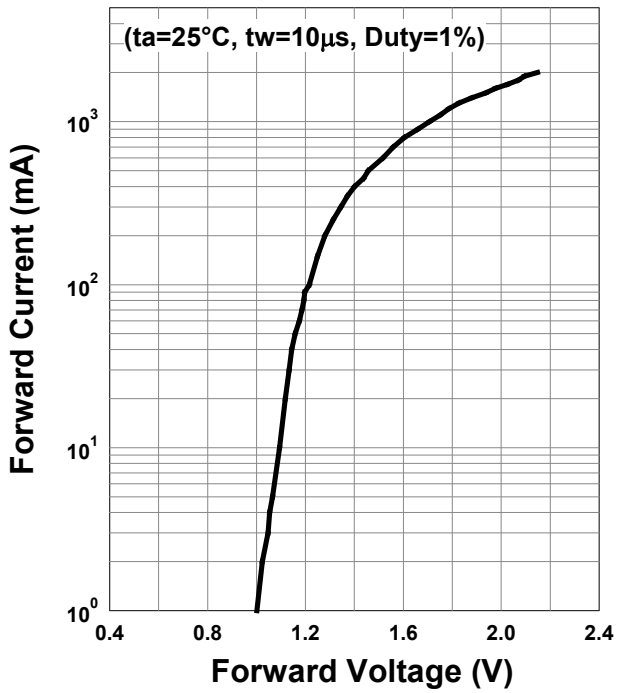
‡ Die shall be mounted on TO-18 gold header without resin coated. (Ta=25°C)

‡ Radiated Power is measured by S3584-08.

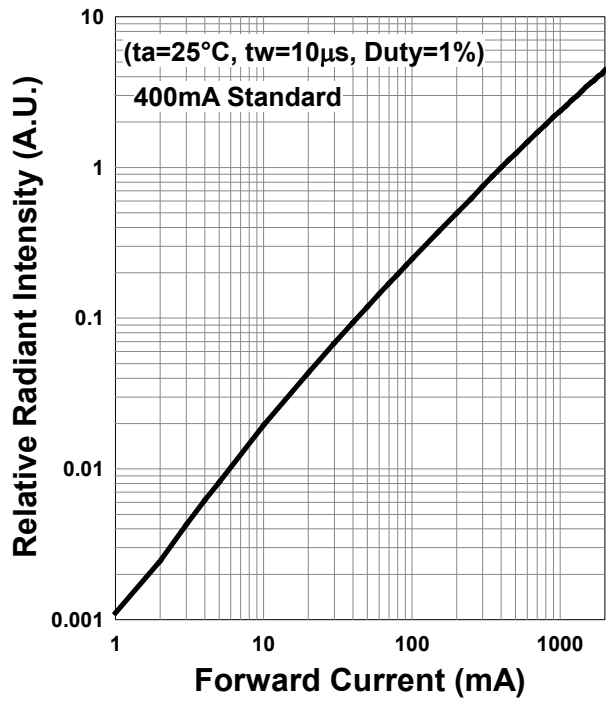


Typical Characteristic Curves

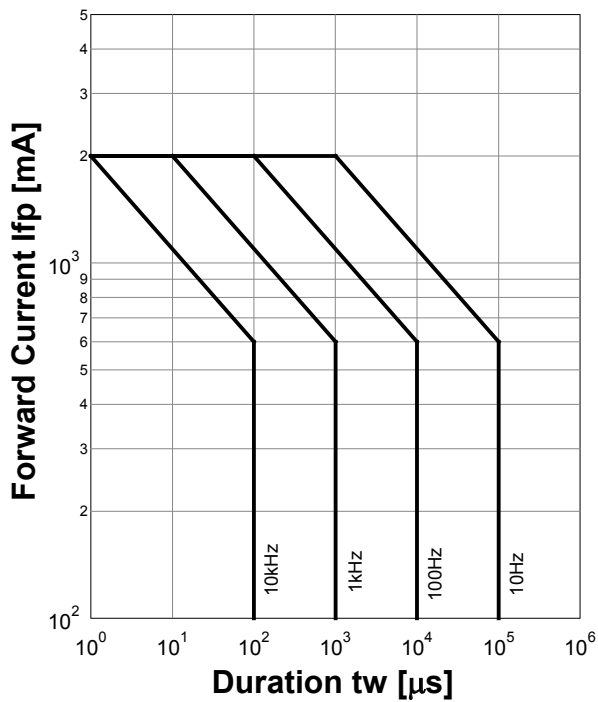
Forward Current - Forward Voltage



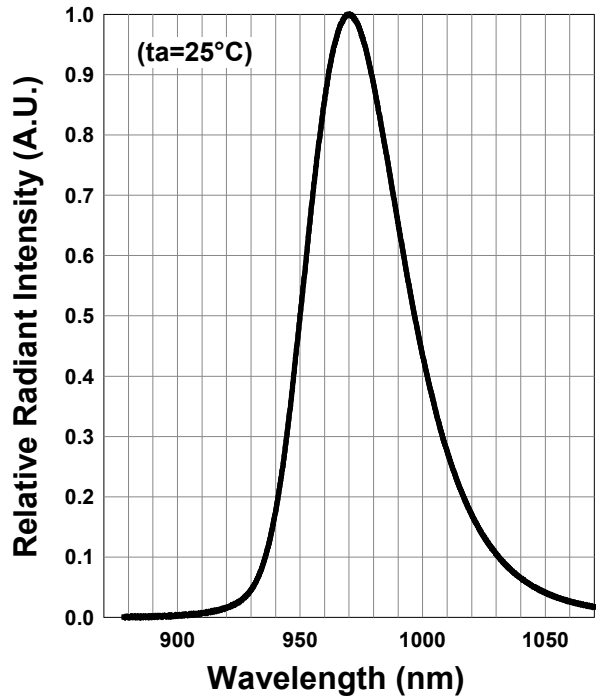
Relative Radiant Intensity - Forward Current

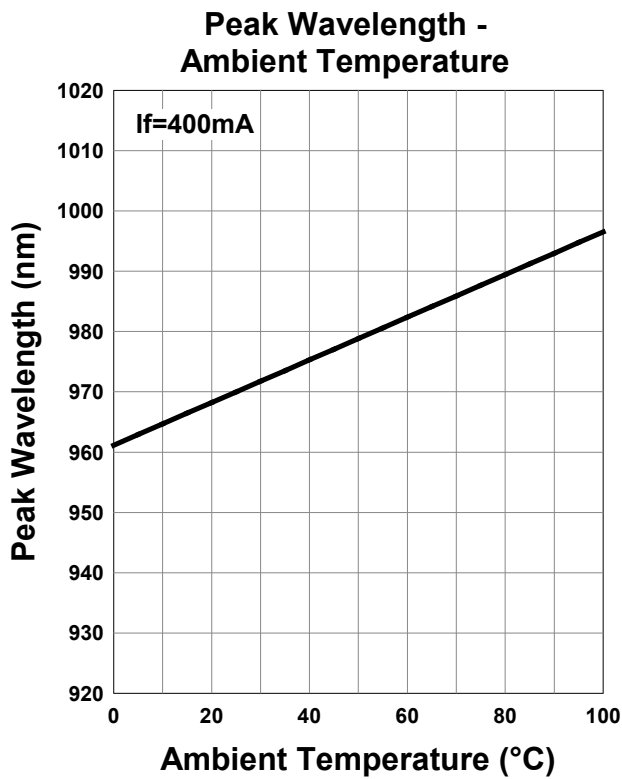
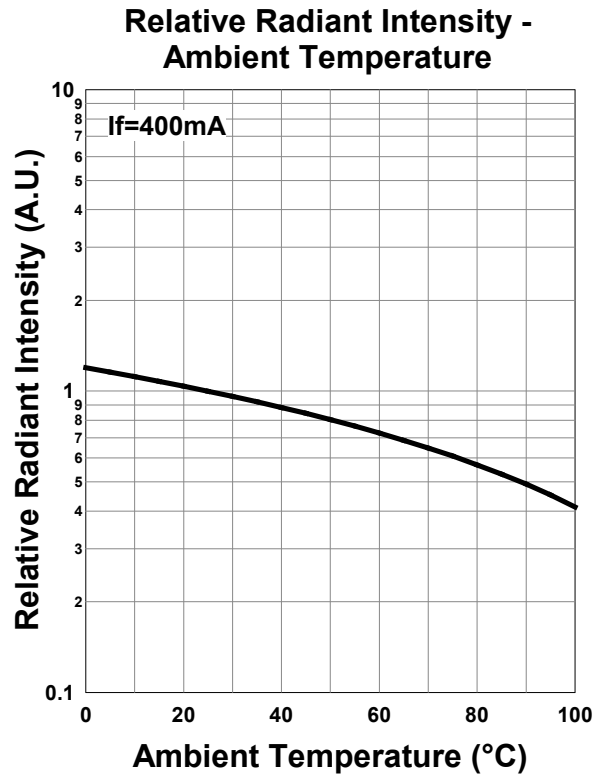
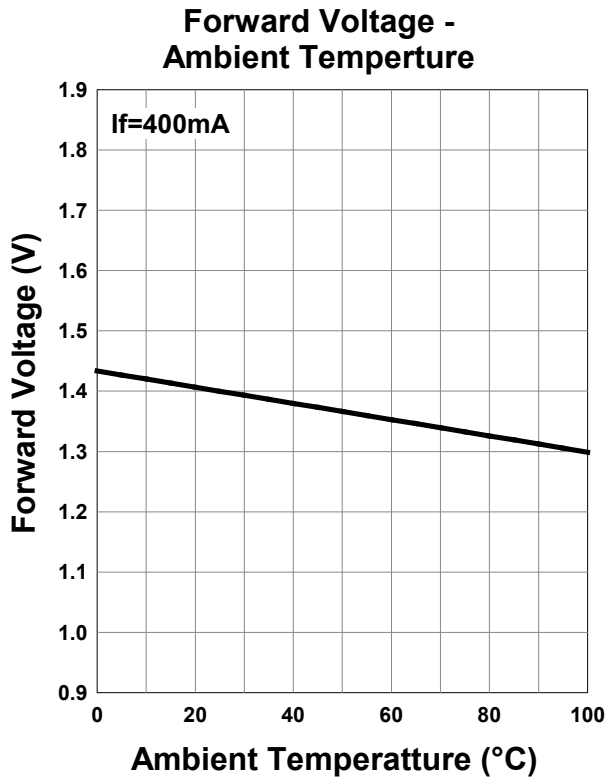


Forward Current - Pulse Duration



Relative Spectral Emission





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.

2016.07