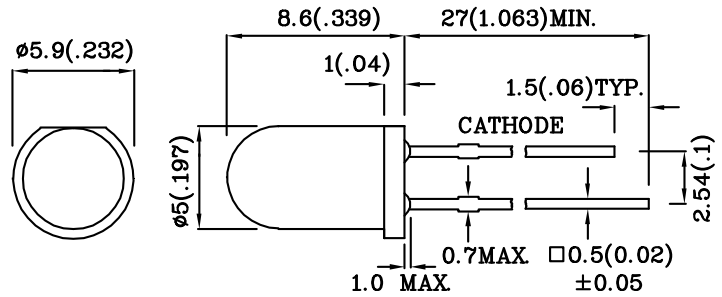


Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- BLUE TRANSPARENT LENS.
- RoHS COMPLIANT.



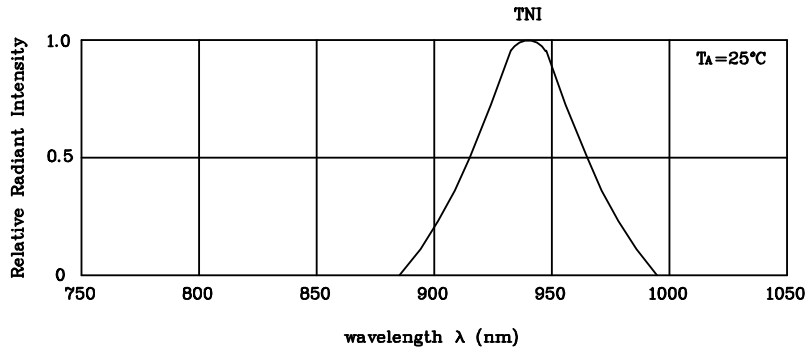
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.

Absolute maximum ratings (TA=25°C)		TNI (GaAs)	Unit
Reverse voltage	VR	5	V
Forward current	IF	50	mA
Forward current (peak) 1/100Duty cycle 10us pulse width	iFS	1.2	A
Power dissipation	PT	100	mW
Operating temperature	TA	-40 ~ +85	°C
Storage temperature	Tstg	-40 ~ +85	
Lead solder temperature [2mm below package base]	260°C For 3 Seconds		
Lead solder temperature [5mm below package base]	260°C For 5 Seconds		

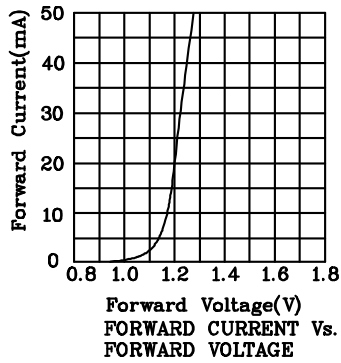
Operating Characteristics (TA=25°C)		TNI (GaAs)	Unit
Forward voltage (typ.) (IF=20mA)	VF	1.2	V
Forward voltage (max.) (IF=20mA)	VF	1.6	V
Reverse current (VR=5V)	IR	10	uA
Wavelength at peak emission (IF=20mA)	λ peak	940	nm
Spectral Line half-width (IF=20mA)	$\Delta\lambda$	50	nm
Capacitance (VF=0V, f=1MHz)	C	90	pF

Part Number	Emitting Material	Lens-color	Luminous Intensity (Po=Mw/sr) @20mA*50mA		Wavelength nm λ P	Viewing Angle 2 θ 1/2
			min.	typ.		
XTNI12BF	GaAs	Blue Transparent	4 *7	19 *29	940	20°

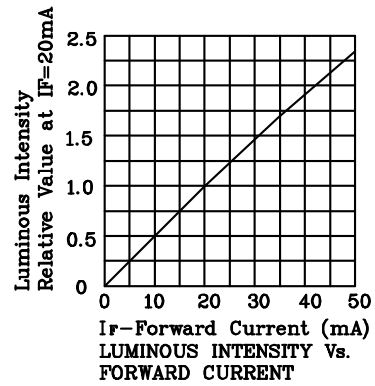


RELATIVE INTENSITY Vs. WAVELENGTH

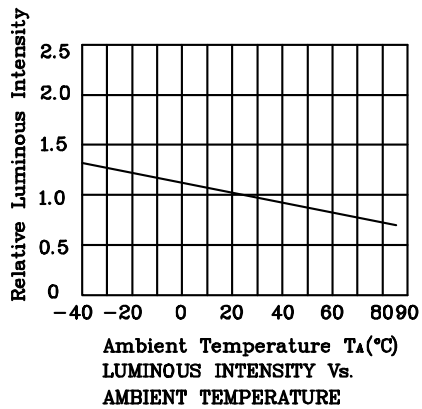
❖ TN1



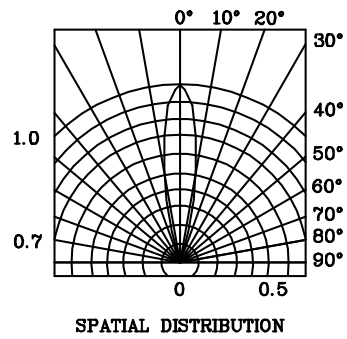
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

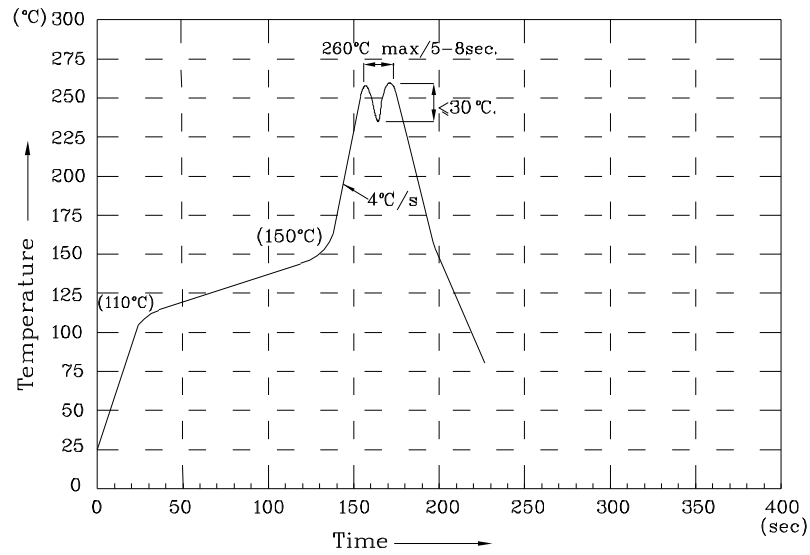


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85 degree°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

Remarks:

If special sorting is required (e.g. binning based on forward voltage or radiant intensity),

the typical accuracy of the sorting process is as follows:

1. Radiant Intensity: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.