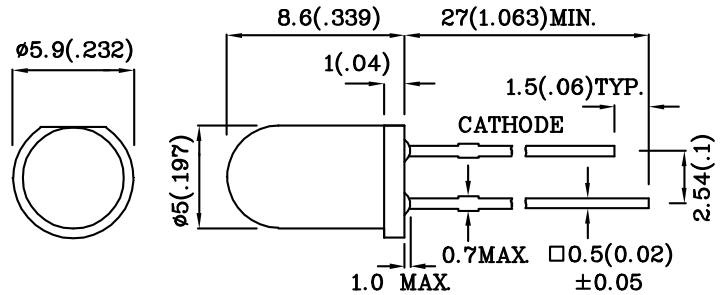


Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- RoHS COMPLIANT.



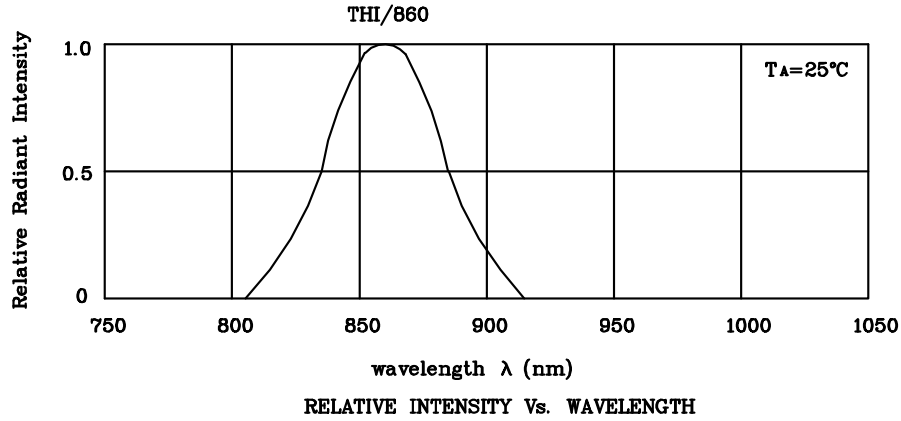
Notes:

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

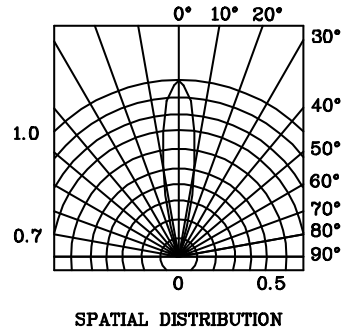
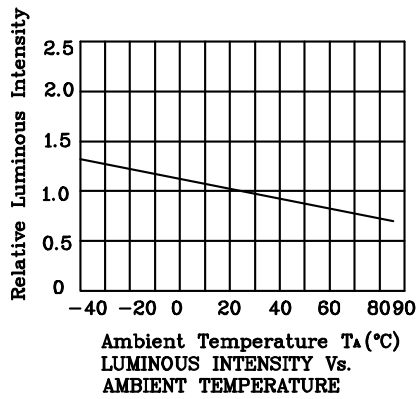
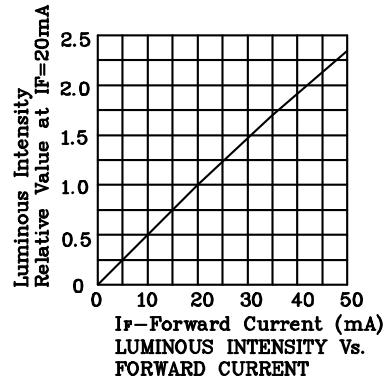
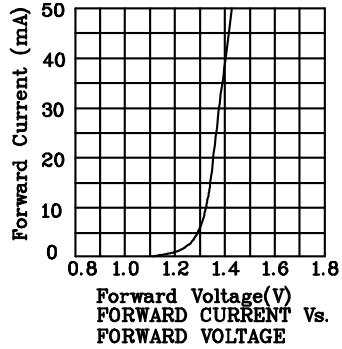
Absolute maximum ratings ($T_A=25^\circ\text{C}$)		THI/860 (GaAlAs)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	50	mA
Forward current (peak) 1/100 Duty cycle 10us pulse width	i_{FS}	1	A
Power dissipation	P_T	100	mW
Operating temperature	T_A	-40 ~ +85	°C
Storage temperature	T_{stg}	-40 ~ +85	
Lead 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 ($T_A=25^\circ\text{C}$)		THI/860 (GaAlAs)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	1.35	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	1.6	V
Reverse current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	860	nm
Spectral Line half-width ($I_F=20\text{mA}$)	$\Delta\lambda$	50	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	30	pF

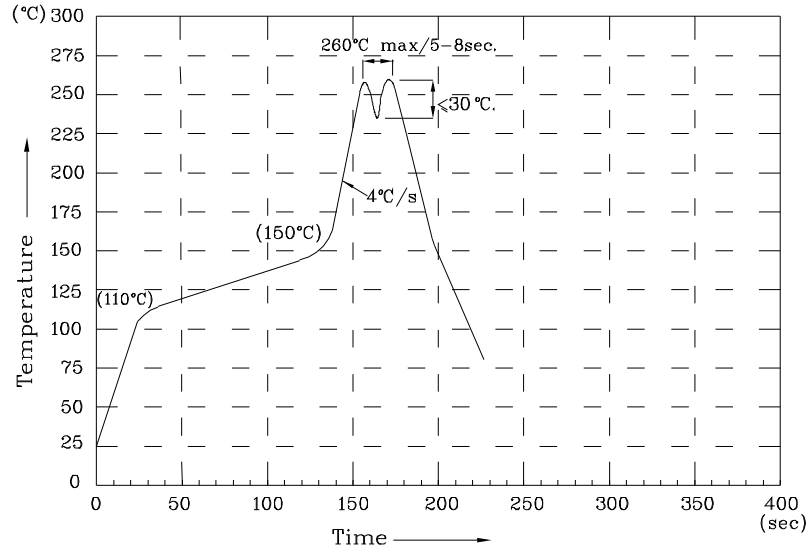
Part Number	Emitting Material	Lens-color	Luminous Intensity ($P_o=Mw/sr$) @20mA *50mA		Wavelength nm λ_P	Viewing Angle 2θ 1/2
			min.	typ.		
XTHI12W860	GaAlAs	Water Clear	10 *50	39 *98	860	20°



❖ **THI/860**



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



NOTES:

1. Recommend the wave temperature $245^\circ\text{C} \sim 260^\circ\text{C}$. The maximum soldering temperature should be less than 260°C .
2. Do not apply stress on epoxy resins when temperature is over 85°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: $\pm 15\%$
2. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.