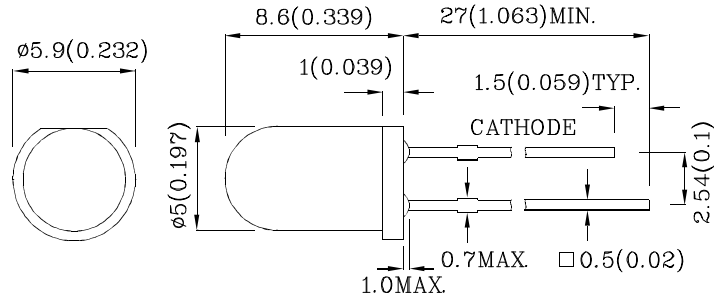


Features

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- RoHS Compliant



Package Schematics



Notes:

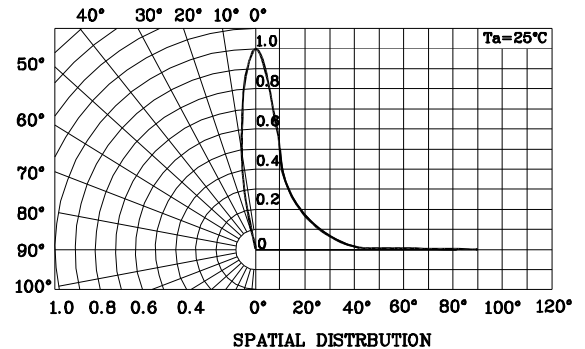
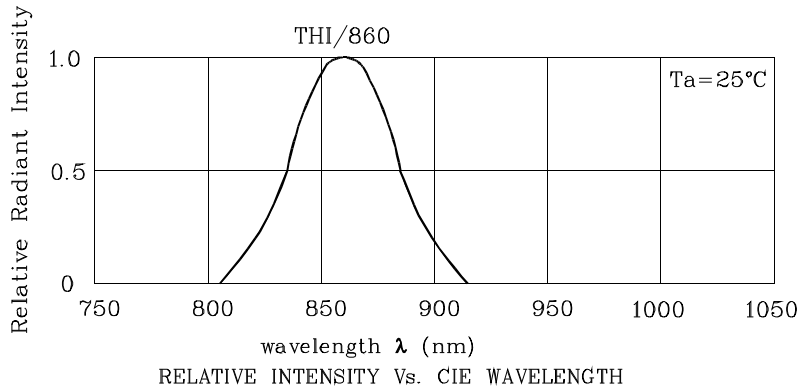
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25 (0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		THI/860 (GaAlAs)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	50	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	1000	mA
Power Dissipation	P _D	80	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		

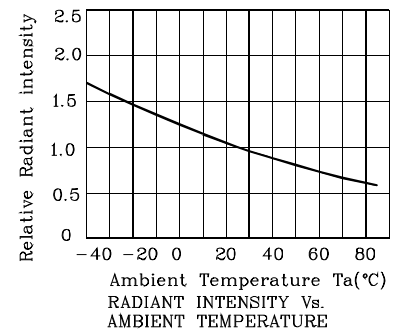
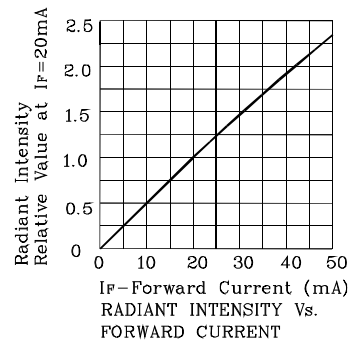
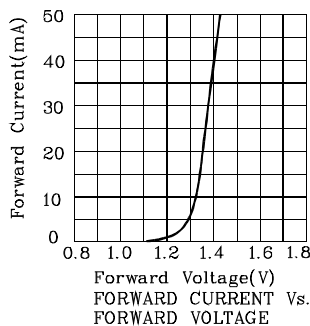
Operating Characteristics ($T_A=25^\circ\text{C}$)		THI/860 (GaAlAs)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	1.35	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	1.6	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission CIE127-2007*(Typ.) ($I_F=20\text{mA}$)	λ_P	850*	nm
Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$)	$\Delta\lambda$	50	nm
Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	30	pF

Part Number	Emitting Material	Lens-color	Radiant Intensity CIE127-2007* ($P_O=\text{mW/sr}$) @20mA		Radiant Intensity CIE127-2007* ($P_O=\text{mW/sr}$) @50mA		Wavelength CIE127-2007* λ_P nm	Viewing Angle 2 θ 1/2
			min.	typ.	min.	typ.		
XTHI12W860	GaAlAs	Water Clear	18*	40*	55*	100*	860*	20 $^\circ$

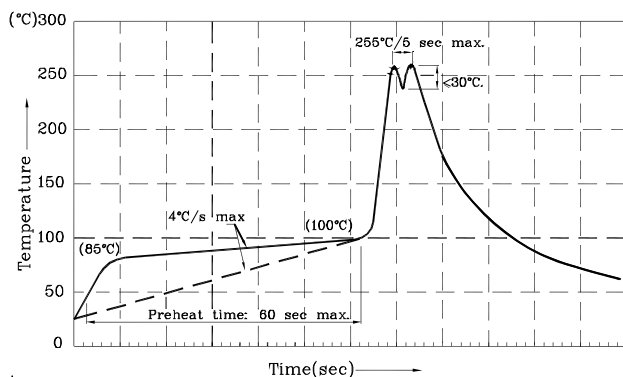
*Radiant Intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ THI/860



Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2. Peak wave soldering temperature between $245^{\circ}\text{C} \sim 255^{\circ}\text{C}$ for 3 sec (5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above 85°C .
4. Fixtures should not incur stress on the component when mounting and during soldering process.
5. SAC 305 solder alloy is recommended.
6. No more than one wave soldering pass.

Remarks:

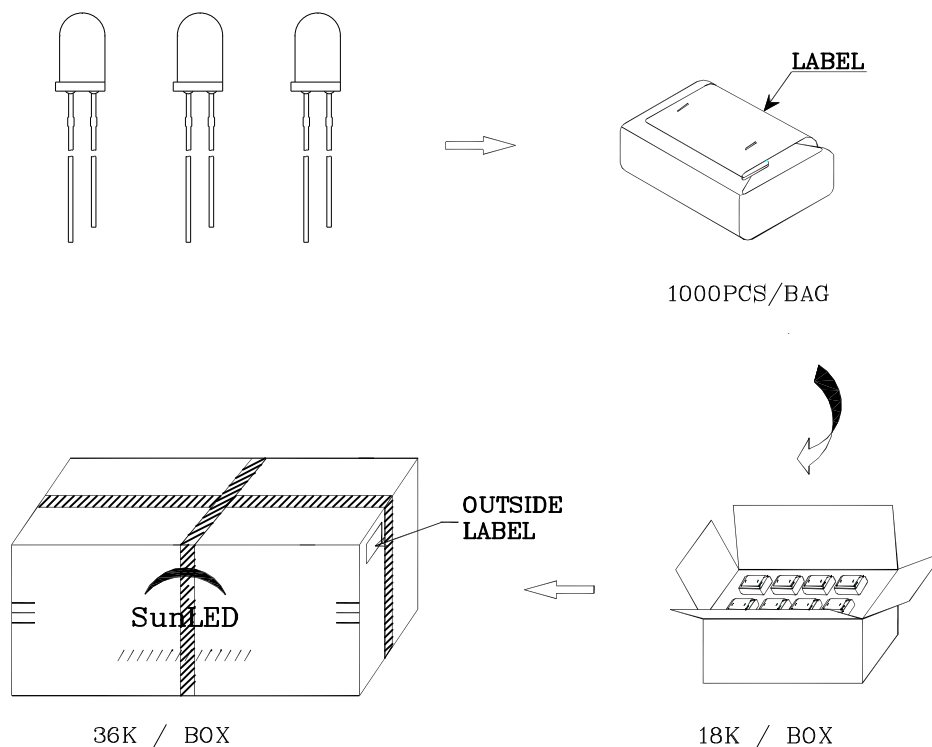
If special sorting is required (e.g. binning based on forward voltage or radiant intensity / luminous flux),

the typical accuracy of the sorting process is as follows:

1. Radiant Intensity / Luminous Flux: $\pm 15\%$
2. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters

PACKING & LABEL SPECIFICATIONS





Q.C. QC
XX XX XXXX
PASSED

P/NO : Xxxx12x	
QTY : 1000 pcs	CODE: XXX
S/N : XX	
LOT NO:  XXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	