



582 SERIES

Ceramic IR SMD LED With Domed Lens

3535 Package

MECHANICAL / SPECIFICATIONS

PART NUMBER:

[582-A24A6-137HPF](#)

DIMENSIONS:

3.50 x 3.50 x 3.03mm

LENS COLOR: Water Clear

STANDARD PACKAGING: 500 pcs / reel

MOISTURE SENSITIVITY LEVEL: 3

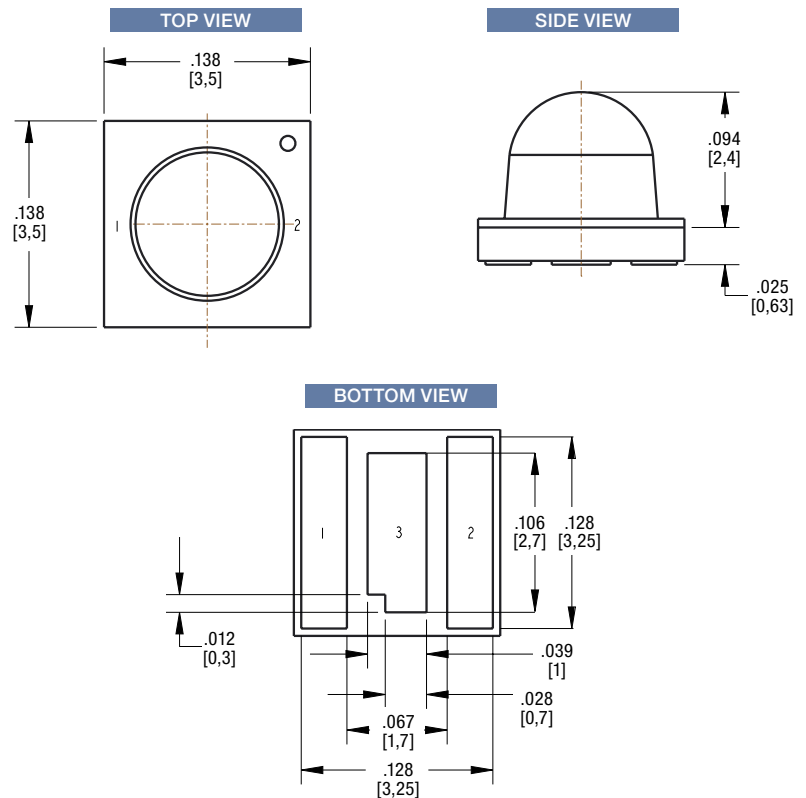
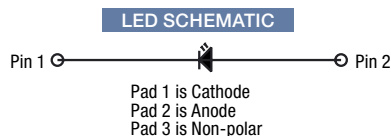
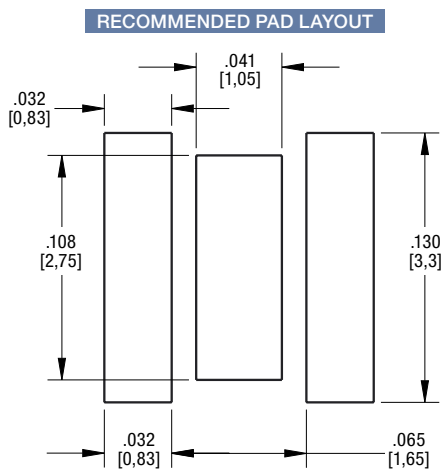
CERTIFICATIONS & RATINGS

RoHS Compliant

FEATURES & BENEFITS

- This product is designed with Ceramic Aluminum Nitride technology for high thermal conductivity to efficiently manage heat in high drive currents
- Dual Junction Chip, Peak Wavelength 850nm, 3.5W series /IF=1000mA

DIMENSIONS inches [mm]



1. All dimensions are in millimeters.
2. Tolerance is ± 0.2 mm unless otherwise noted.

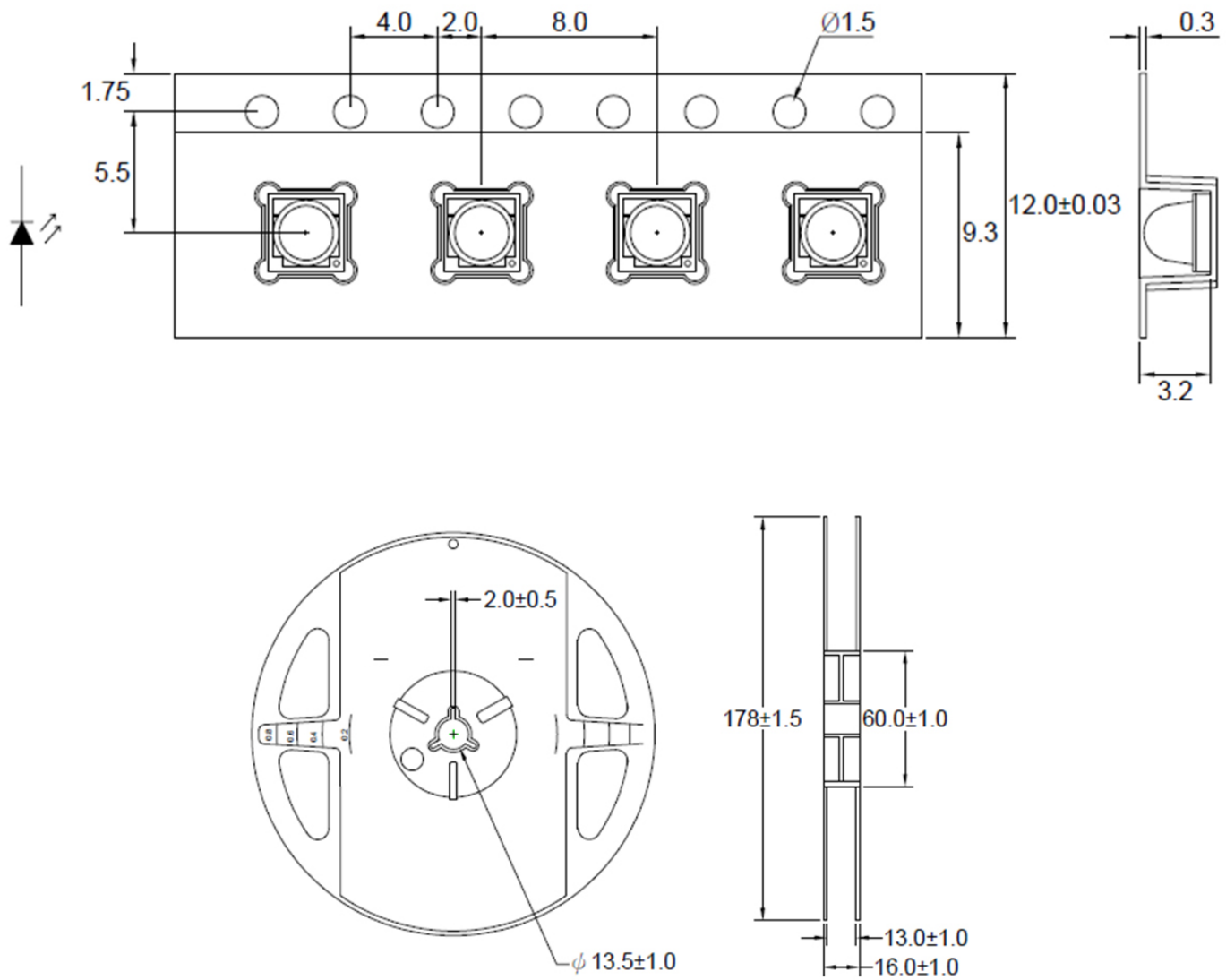
ABSOLUTE MAXIMUM RATINGS @ TA=25°C

Parameter	Maximum Rating	Unit
	Values	
Power Consumption (Ptot)	3.7	W
DC Forward Current (IF)	1000	mA
Reverse Current (Ir) / Vr=5V	10	uA
Peak Pulse Current (IFP) (D≤ 1/10; f≤ 10KHz)	2000	mA
Operating Temperature Range	-40°C to +125°C	
Storage Temperature Range	-40°C to +125°C	
LED Junction Temperature (TJ)	145°C	
Thermal Resistance (Rth j-s)	8 °C/W	
Soldering Temperature (Tp)	260°C	

ELECTRICAL / OPTICAL CHARACTERISTICS @ TA=25°C

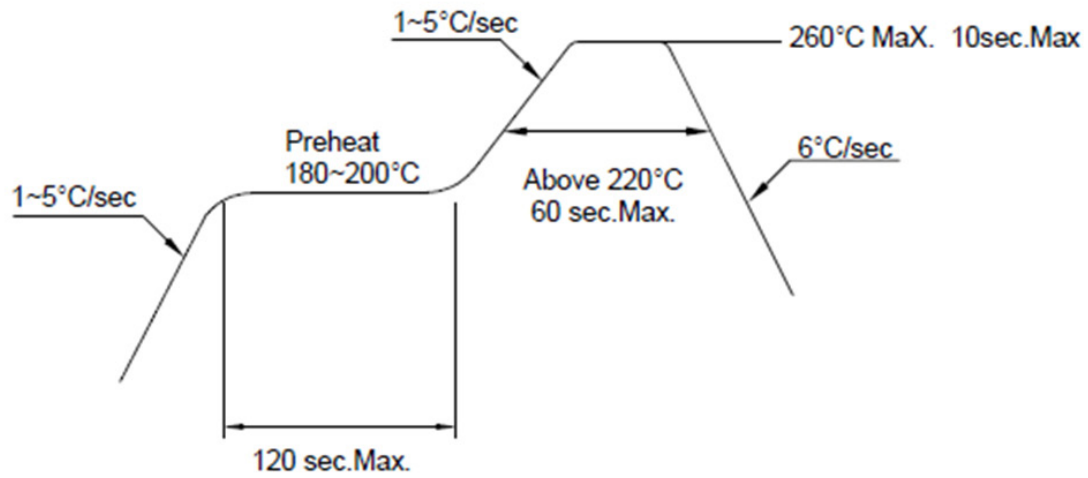
Parameter	Symbol	Values			Unit	Test Condition
		Min.	Typ.	Max.		
Radiant Flux	Φe		1250		mW	I _f =1000mA
Radiant Intensity	Ie	520	790	1070	mW/sr	I _f =1000mA
Forward Voltage	VF	2.8	3.2	3.7	V	I _f =1000mA
Peak Wavelength	λp		850		nm	I _f =1000mA
Spectral Bandwidth at 50% I _{max}	Δλ		40		nm	I _f =1000mA
Viewing Angle	2θ1/2		60		deg	I _f =1000mA

TAPE AND REEL SPECIFICATION



Note: 1. Packaging is 500 pcs per reel on 7" reel
2. MSL Level: 3

REFLOW SOLDERING PROFILE



Note: Reflow soldering should not be done more than two times.

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

Fig.1 Relative Intensity vs. Forward Current

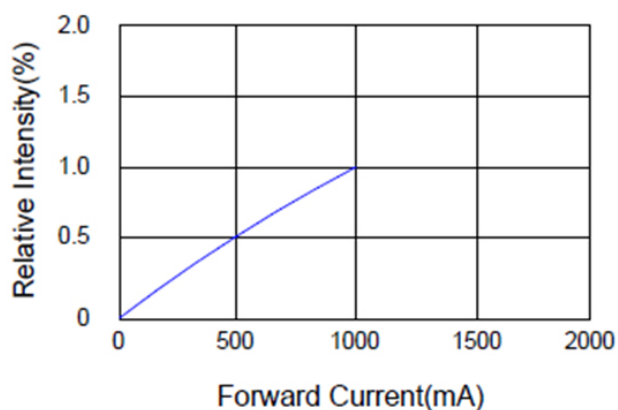


Fig.2 Forward Current vs. Ambient Temperature

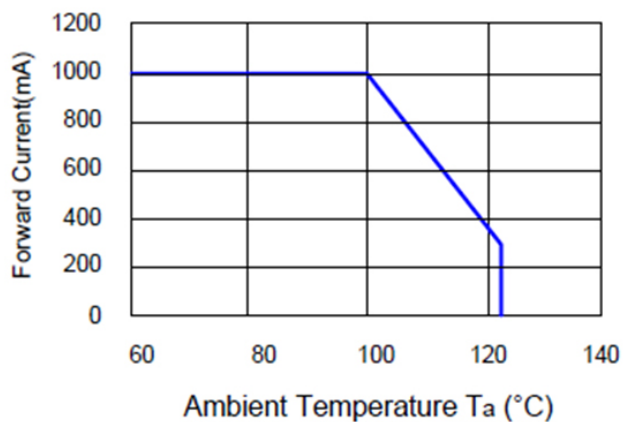


Fig.3 Relative Radiant Power vs. Wavelength

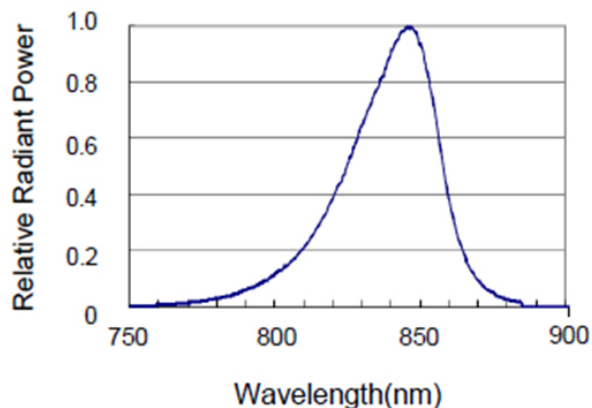


Fig.4 Forward Voltage vs. Forward Current

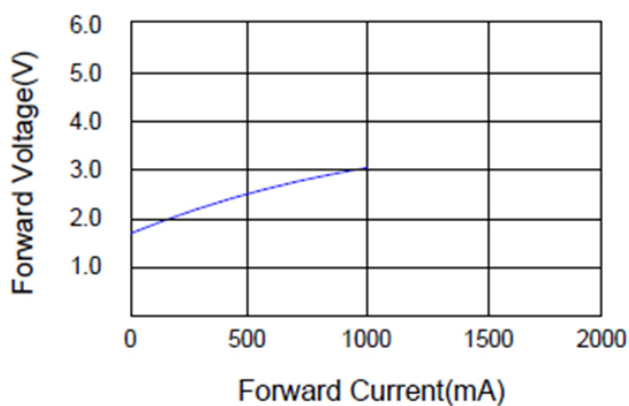


Fig.5 Directive Radiation

