

582 SERIES Ceramic IR SMD LED With Domed Lens 3535 Package

MECHANICAL / SPECIFICATIONS

PART NUMBER:
582-A24C6-137HPF

DIMENSIONS:
3.50 x 3.50 x 3.03mm

LENS COLOR: Water Clear

STANDARD PACKAGING: 500 pcs / reel

MOISTURE SENSITIVITY LEVEL: 3

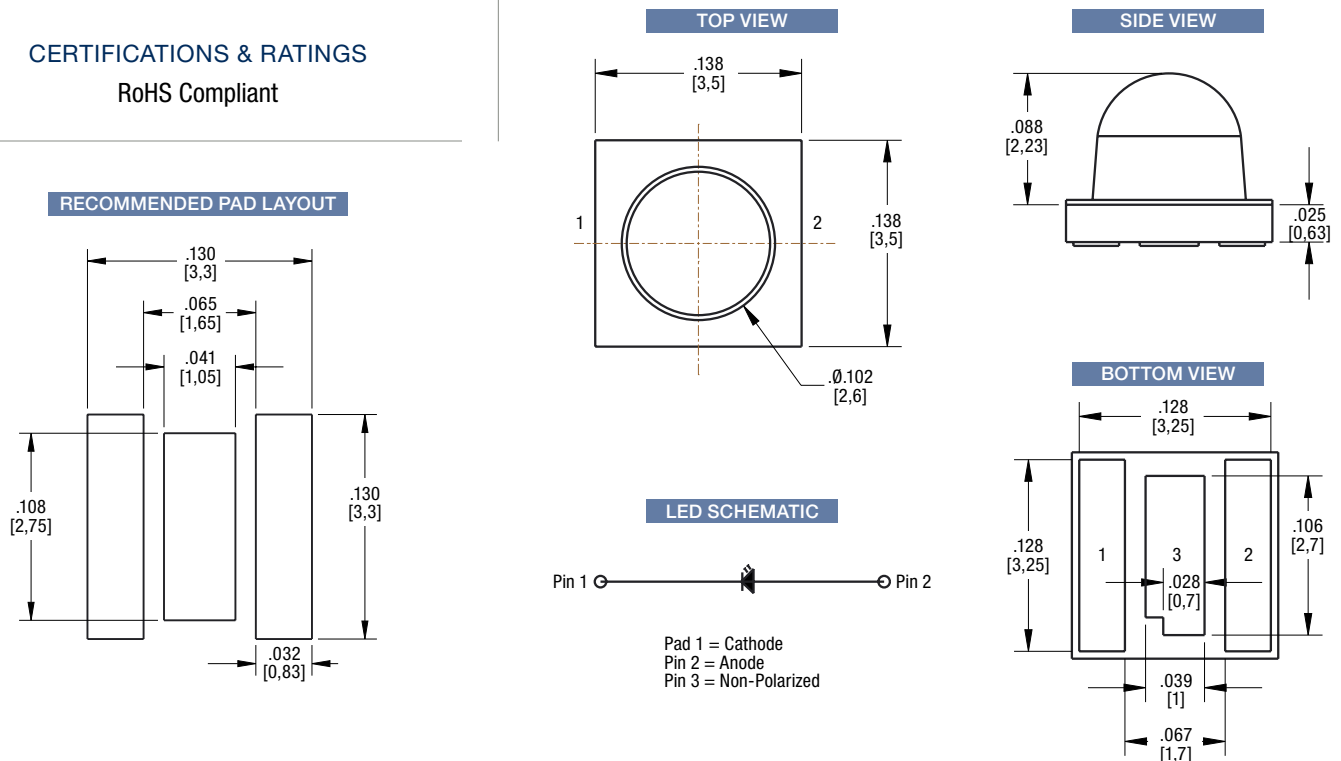
CERTIFICATIONS & RATINGS

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 940nm

DIMENSIONS inches [mm]



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

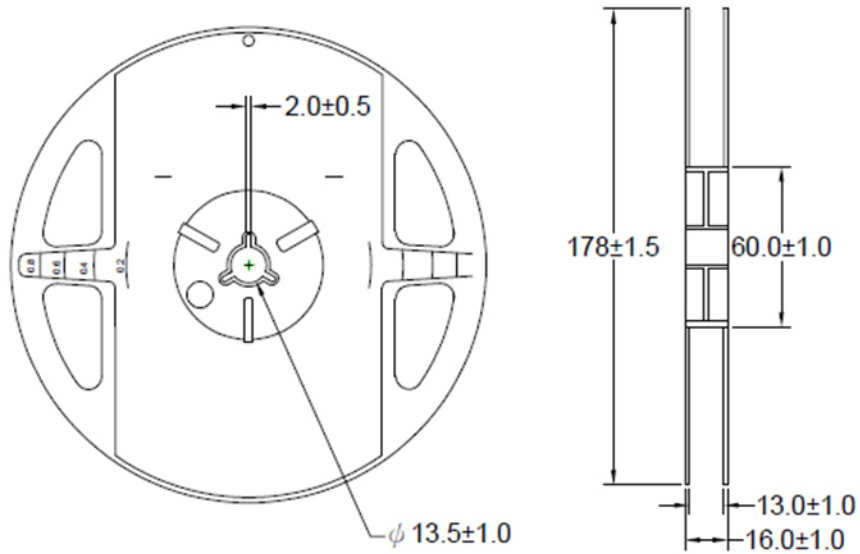
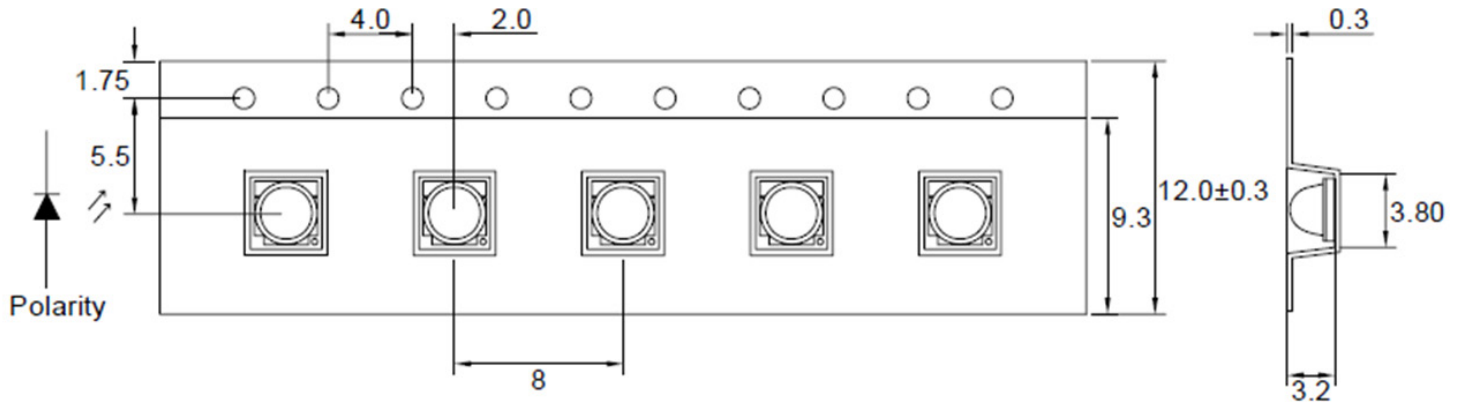
ABSOLUTE MAXIMUM RATINGS @ TA=25°C

Parameter	Maximum Rating	Unit
	Values	
Power Consumption (P _{tot})	3.7	W
DC Forward Current (I _F)	1000	mA
Reverse Current (I _r) / V _r =5V	10	uA
Peak Pulse Current (I _{FP}) (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 (T _J)	145°C	
Thermal Resistance (R _{th j-s})	8 °C/W	
Soldering Temperature (T _p)	260°C	

ELECTRICAL / OPTICAL CHARACTERISTICS @ TA=25°C

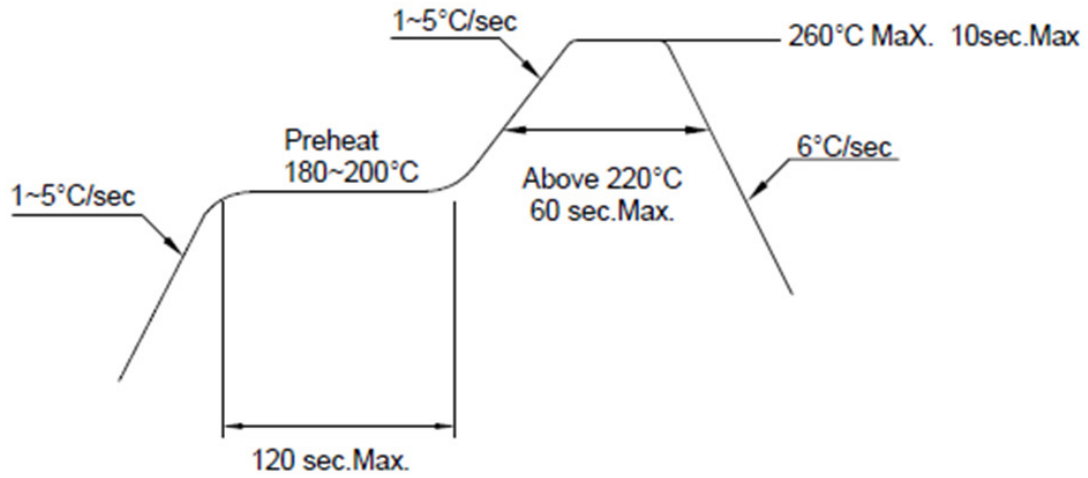
Parameter	Symbol	Values			Unit	Test Condition
		Min.	Typ.	Max.		
Radiant Flux	Φ _e		1450		mW	I _F =1000mA
Radiant Intensity	I _e	740	960	1535	mW/sr	I _F =1000mA
Forward Voltage	V _F	2.8	3.2	3.7	V	I _F =1000mA
Peak Wavelength	λ _p		940		nm	I _F =1000mA
Spectral Bandwidth at 50% I _{max}	Δλ		40		nm	I _F =1000mA
Viewing Angle	2θ _{1/2}		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

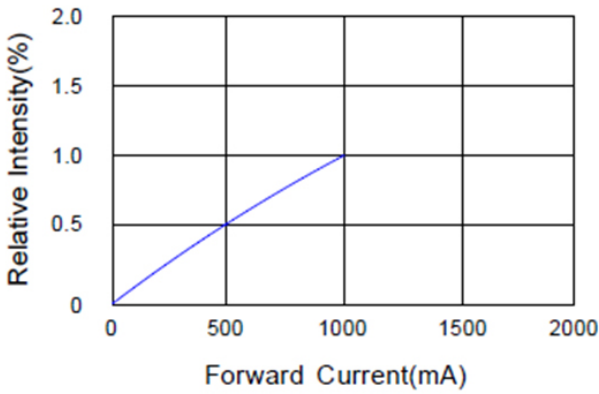


Fig.2 Forward Current vs. Ambient Temperature

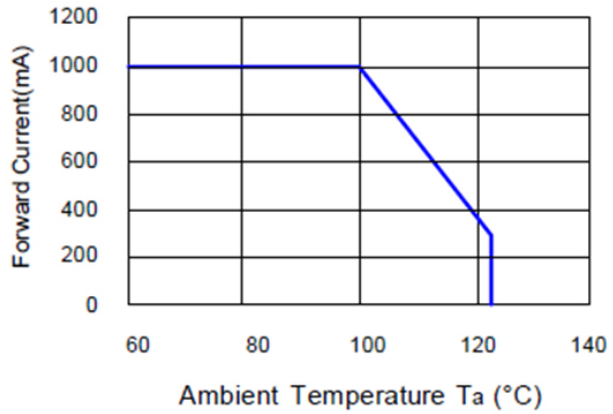


Fig.3 Relative Radiant Power vs. Wavelength

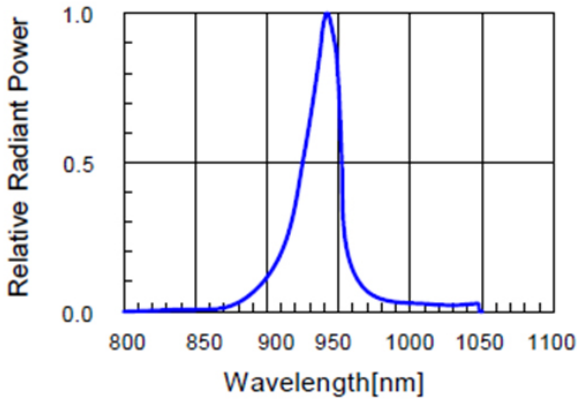


Fig.4 Forward Voltage vs. Forward Current

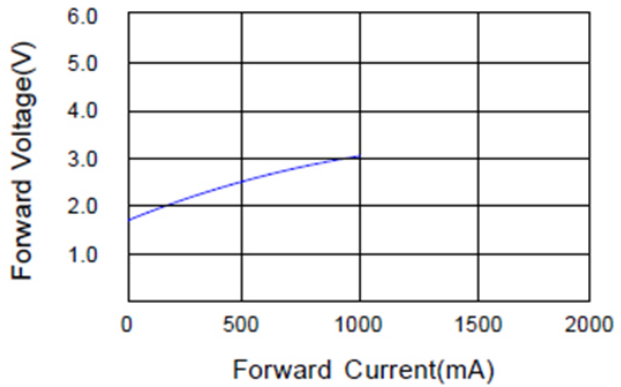
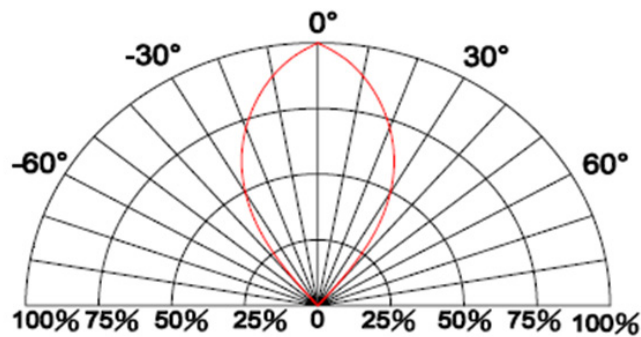


Fig.5 Directive Radiation



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