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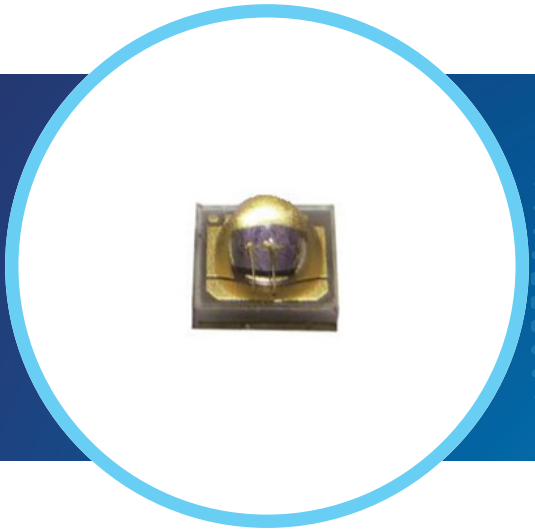


582 SERIES

Ceramic IR SMD LED With Domed Lens

3535 Package

MECHANICAL / SPECIFICATIONS

PART NUMBER:
582-A24A3-137HPF

DIMENSIONS:
3.50 x 3.50 x 3.63mm

LENS COLOR: Water Clear

STANDARD PACKAGING: 500 pcs / reel

MOISTURE SENSITIVITY LEVEL: 3

MATERIAL: AlGaAs

VIEWING ANGLE: 33°

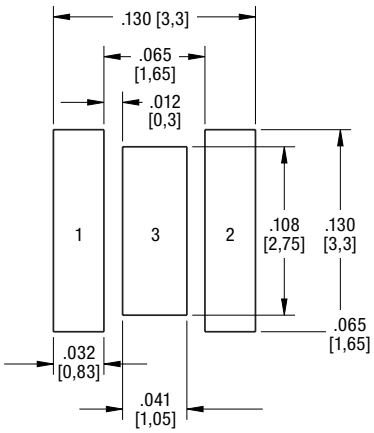
CERTIFICATIONS & RATINGS

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

RECOMMENDED PAD LAYOUT

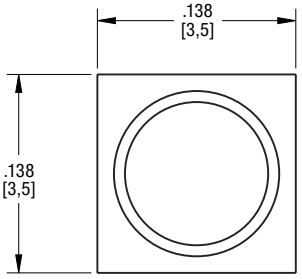


Pad 1 is Cathode
Pad 2 is Anode
Pad 3 is Non-polar

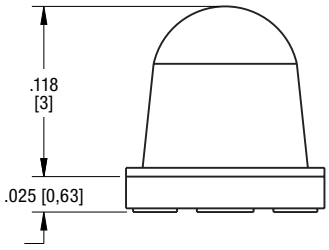
1. All dimensions are in millimeters.
2. Tolerance is ±0.2mm unless otherwise noted.

DIMENSIONS inches [mm]

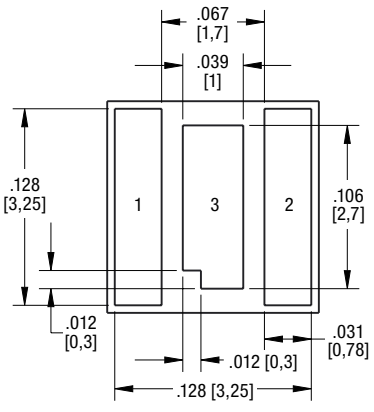
TOP VIEW



SIDE VIEW



BOTTOM VIEW



ABSOLUTE MAXIMUM RATINGS @ TA=25°C

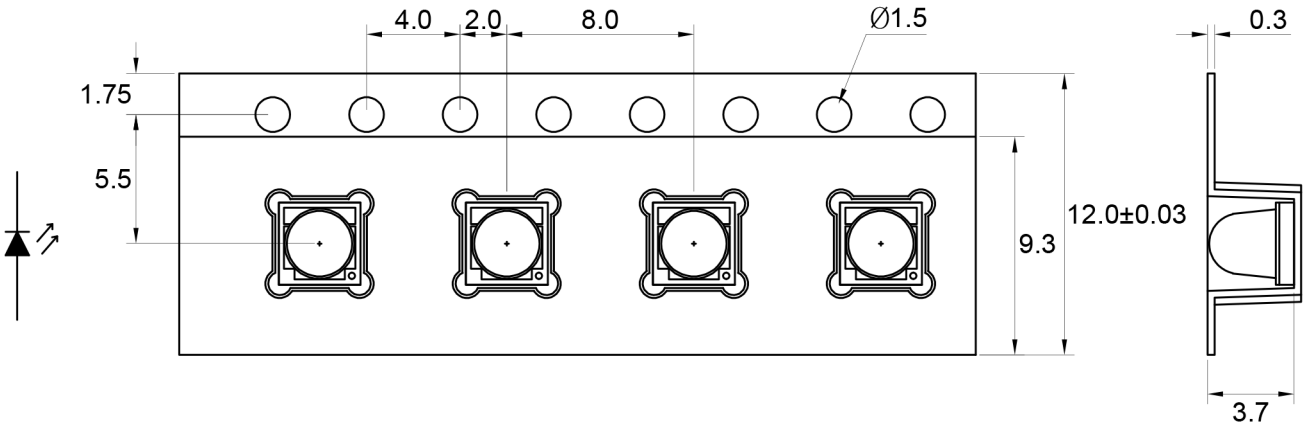
Parameter	Symbol	Maximum Rating	Unit
		Values	
Power Consumption	Ptot	3.6	W
DC Forward Current	IF	1000	mA
Reverse Current (VR=5V)	Ir	10	uA
Peak Pulse Current (D≤ 1/10; f≤ 10KHz)	IFP	2000	mA
ESD Sensitivity	HMB 100pf/1.5KΩ	2K	V
	MM 200pf/0Ω	150	V
LED Junction Temperature	Tj	145	°C
Thermal Resistance	Rth j-s	8	°C/W
Operating Temperature Range	Topr	-40 to +125	°C
Storage Temperature Range	Tstg	-40 to +125	°C
Soldering Temperature	Tp	260	°C

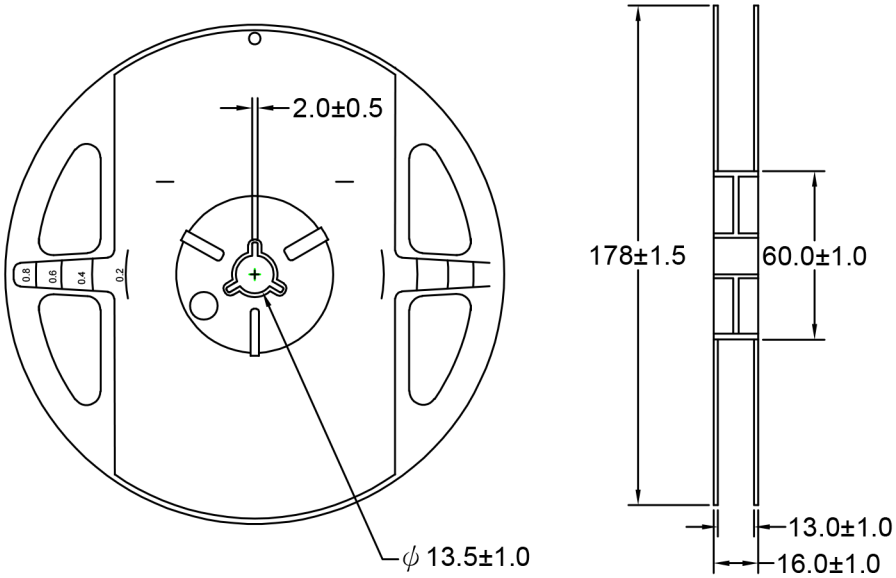
ELECTRICAL / OPTICAL CHARACTERISTICS @ TA=25°C

Parameter	Symbol	Values			Unit	Test Condition
		Min.	Typ.	Max.		
Radiant Intensity	Ie	1070	1700	2205	mW/sr	I_F=1A
Radiant Flux	Φe		1400		mW	I_F=1A
Peak Emission Wavelength	λp		850		nm	I_F=1A
Spectral Bandwidth at 50% Imax	Δλ		40		nm	I_F=1A
Forward Voltage	VF	2.7		3.6	V	I_F=1A
Viewing Angle	2θ1/2		33		deg	I_F=1A

Note: 1.The forward voltage data did not including ±0.1V testing tolerance.
2.The radiant Intensity data did not including ±15% testing tolerance.

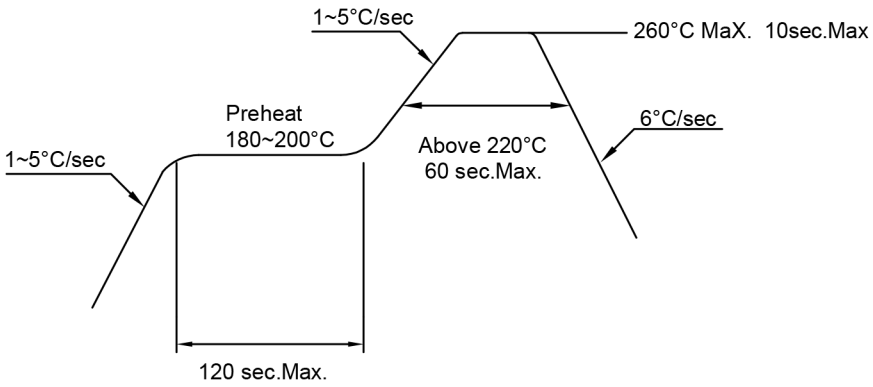
TAPE AND REEL SPECIFICATION





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

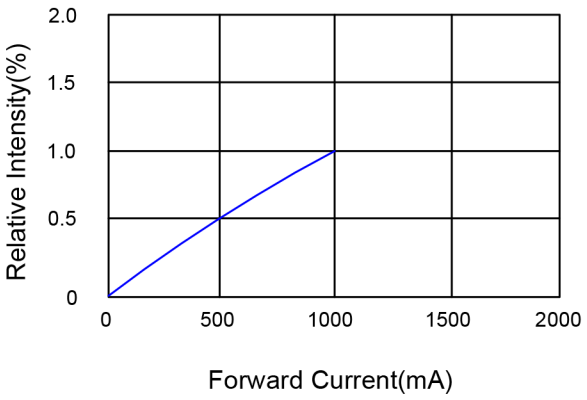


Fig.2 Forward Current VS. Ambient Temperature

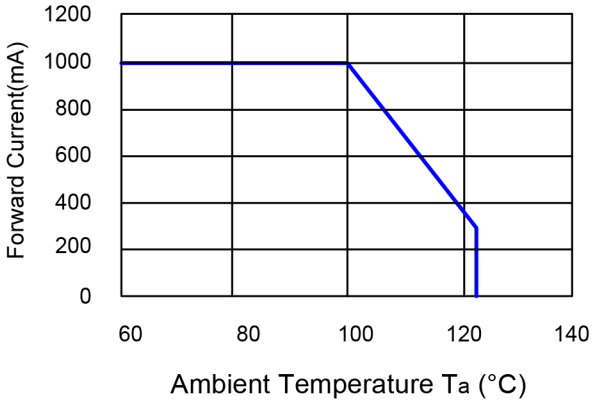


Fig.3 Relative Radiant Power VS. Wavelength

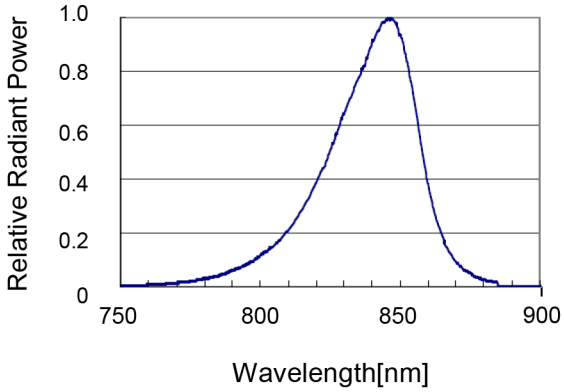


Fig.4 Forward Voltage VS. Forward Current

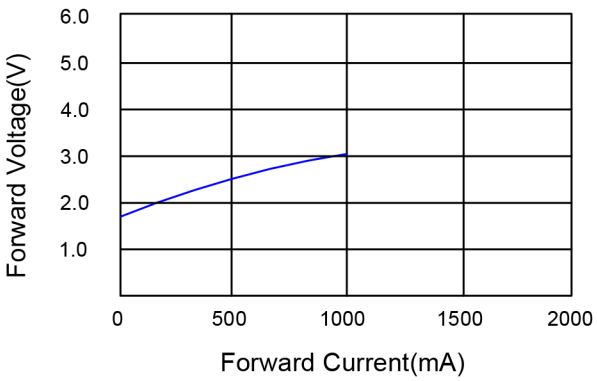
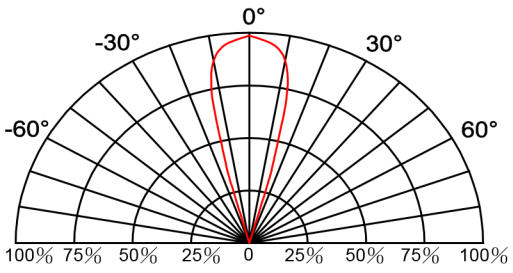


Fig.5 Directive Radiation



RoHS compliant