SUBMINIATURE SOLID STATE LAMP

Part Number: AM27SURCK09 Hyper Red

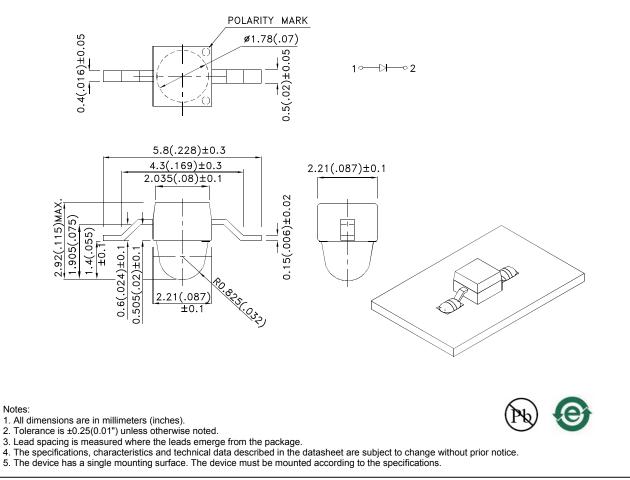
Features

- Subminiature package.
- Z-Bend lead.
- Long life solid state reliability.
- Low package profile.
- Package :1000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

The Hyper Red source color devices are made with Al-GalnP on GaAs substrate Light Emitting Diode.

Package Dimensions



SPEC NO: DSAD1329 APPROVED: WYNEC REV NO: V.10 CHECKED: Allen Liu DATE: APR/14/2011 DRAWN: J.Yu PAGE: 1 OF 5 ERP: 1202000399

Selection Guide

Selection Guide					
Part No.	Dice	Lens Type	lv (mo @ 20	/ - -	Viewing Angle [1]
			Min.	Тур.	201/2
AM27SURCK09	Hyper Red (AlGaInP)	Water Clear	1500	2400	20°

Notes:

θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	650		nm	I⊧=20mA
λD [1]	Dominant Wavelength	Hyper Red	630		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	I⊧=20mA
С	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	I⊧=20mA
lr	Reverse Current	Hyper Red		10	uA	Vr=5V

Notes:

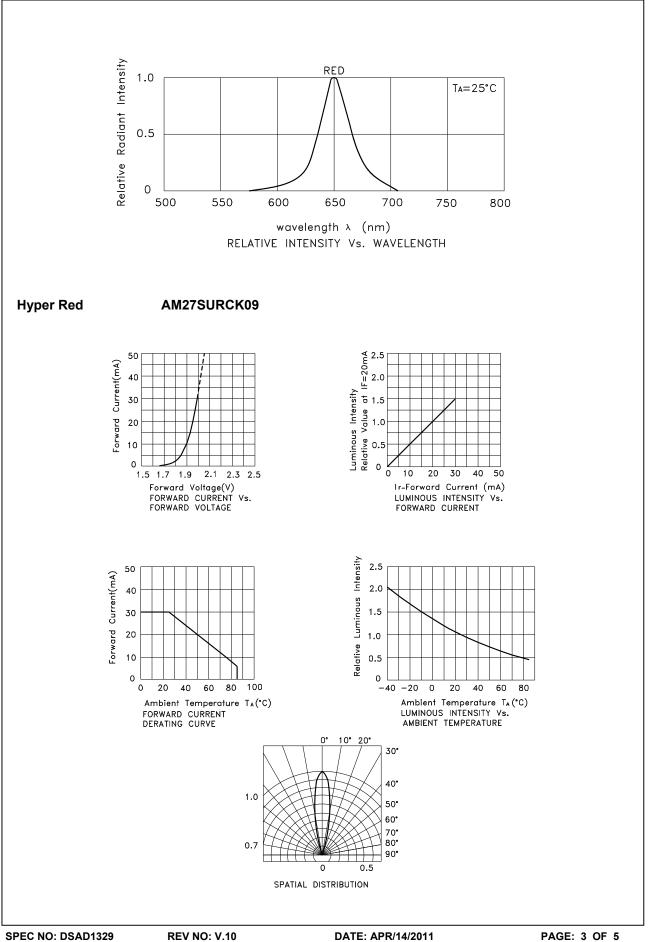
1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	185	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

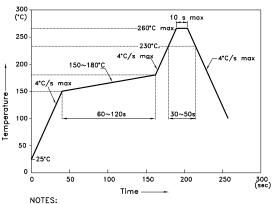
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



AM27SURCK09

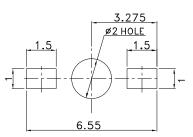
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

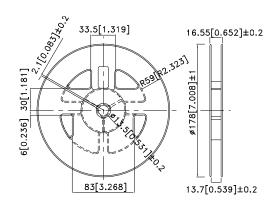


NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. 3.Number of reflow process shall be 2 times or less.

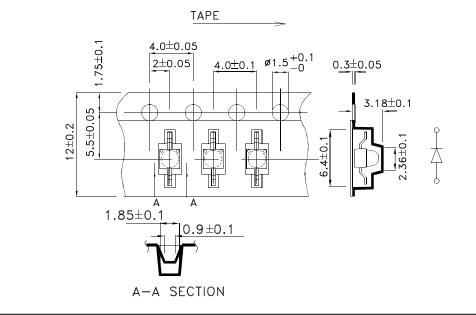
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)







Tape Dimensions (Units : mm)



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