### SUBMINIATURE SOLID STATE LAMP

Part Number: AM27SURCK03 Hyper Red

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

Description

#### **Features**

- Subminiature package.
- Gull wing.
- Long life solid state reliability.
- Low package profile.
- Package :1000pcs / reel.
- Moisture sensitivity level : level 3.
- · RoHS compliant.

### **Package Dimensions**

#### POLARITY MARK $0.4(0.016)\pm 0.05$ ø1.78(0.07) Ċ -17--02 0 ы С 180.825.052 .02)±0. 2.21(0.087) ±0.1 0.15(.006) 92(0.115)MAX 505( 905(.075) ±0.02 н0.1 0 0.66(0.026)±0.1 0.13MAX. 2.21(.087) .035(.08) ±0.1 ±0.1 4.5(0.177)±0.5 All dimensions are in millimeters (inches). Tolerance is ±0.25(0.01") unless otherwise noted.

- 3. Lead spacing is measured where the leads emerge from the package.
- 4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

5. The device has a single mounting surface. The device must be mounted according to the specifications.

SPEC NO: DSAD1297 **APPROVED: WYNEC** 

Notes:

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#### Selection Guide

Part No.	Dice	Lens Type	IV (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
AM27SURCK03	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:

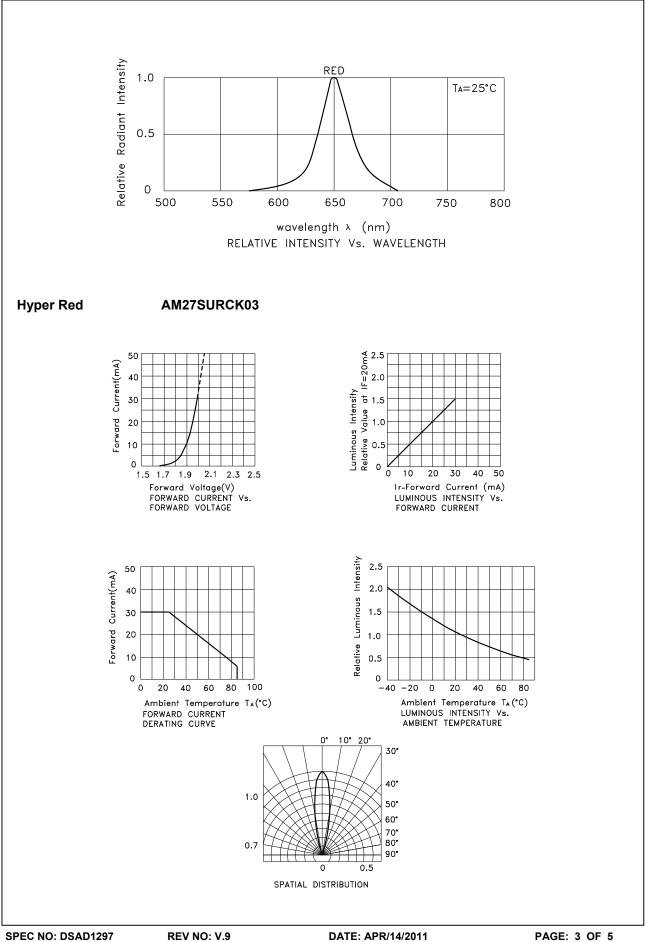
1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

#### 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		

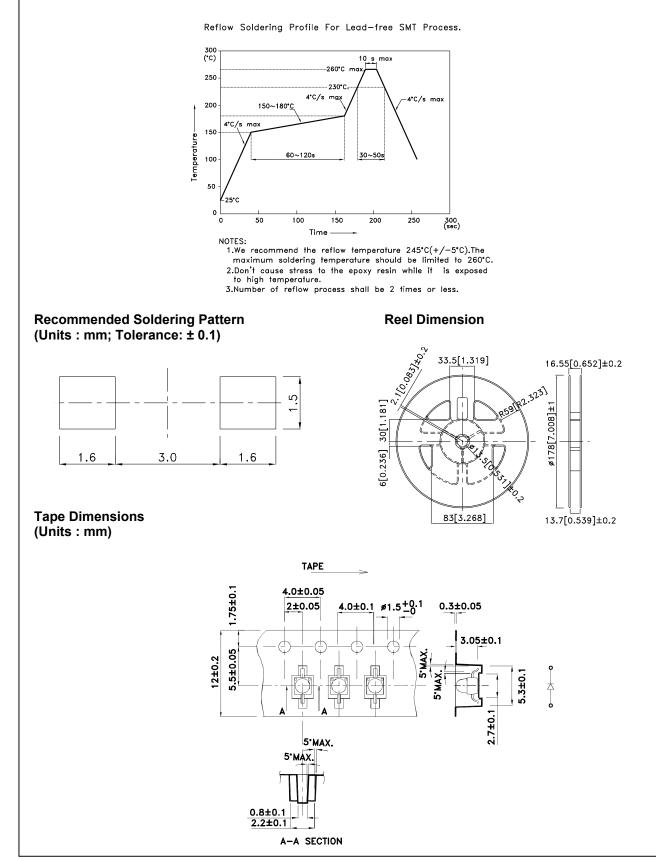
Note:

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



### AM27SURCK03

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.



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