3.0x2.0mm SURFACE MOUNT LED LAMP

Part Number: AA3020EC

High Efficiency Red

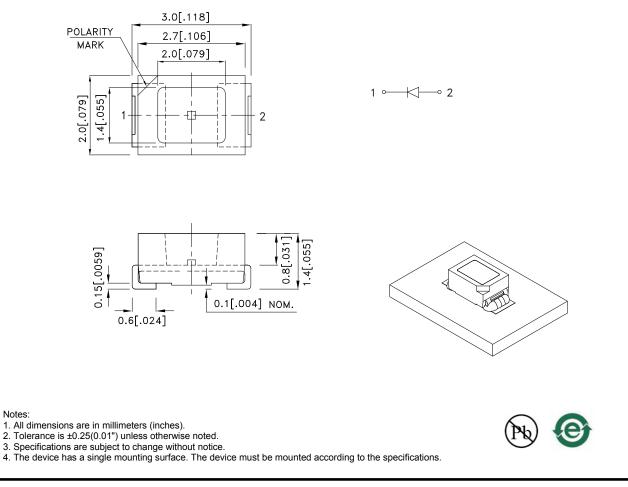
Features

- 3.0mm x 2.0mm, 1.4mm high, only minimum space required.
- Suitable for compact optoelectronic applications.
- Low power consumption.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions



SPEC NO: DSAD1211 APPROVED: WYNEC REV NO: V.5 CHECKED: Allen Liu DATE: SEP/29/2009 DRAWN: J.Yu PAGE: 1 OF 5 ERP: 1201005136

Selection Guide

Selection Guide					
Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA Min. Typ.		Viewing Angle [1]
					201/2
AA3020EC	High Efficiency Red (GaAsP/GaP)	WATER CLEAR	7	20	90°

Notes:

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

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	I⊧=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	625		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	I⊧=20mA
С	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	2	2.5	V	I⊧=20mA
lr	Reverse Current	High Efficiency Red		10	uA	Vr=5V

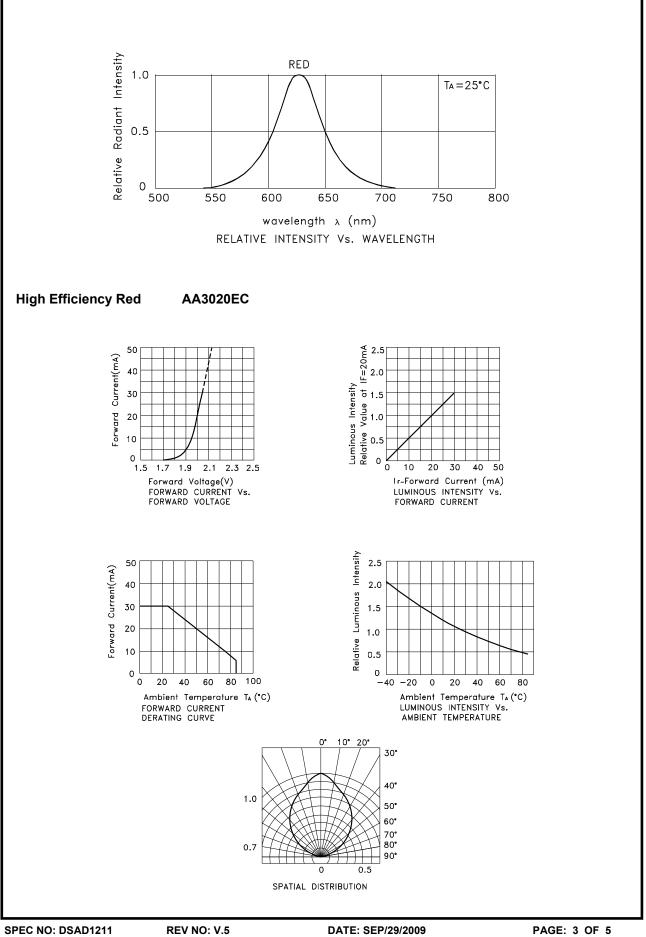
Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red			
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	160	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

Note:

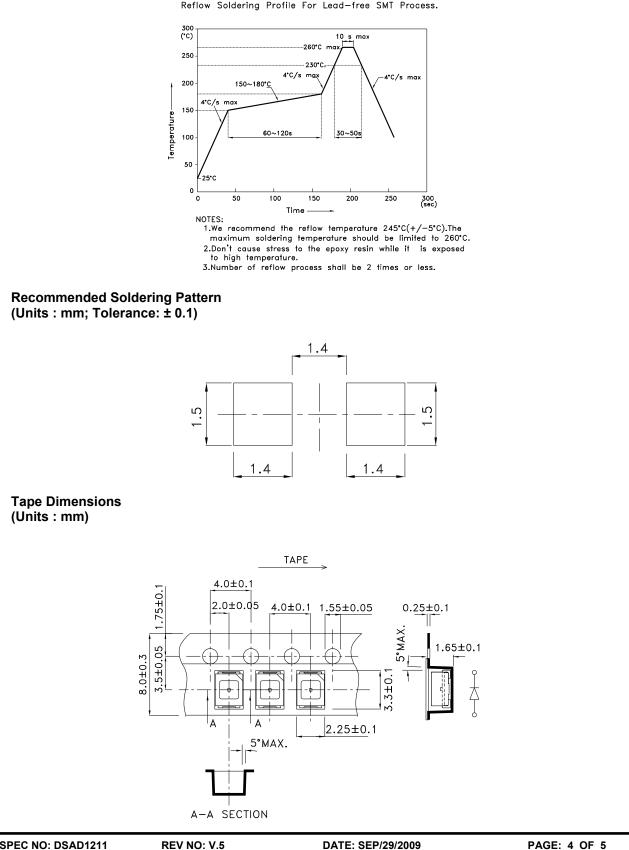
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



AA3020EC

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.



REV NO: V.5 CHECKED: Allen Liu

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