

2.7x3.4mm SURFACE MOUNT LED LAMP

AA2734ESGC

HIGH EFFICIENCY RED SUPER BRIGHT GREEN

Features

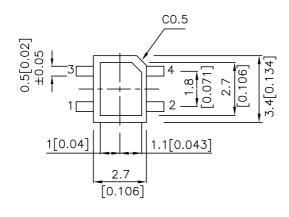
- 2.7mm X 3.4mm SMT LED, 1.5mm HEIGHT ONLY.
- BOTH CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE: 1000PCS / REEL.
- RoHS COMPLIANT.

Description

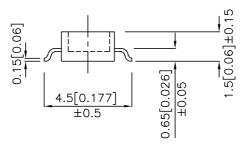
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions







Notes

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.
- Specifications are subject to change without notice.

SPEC NO: DSAD1240 APPROVED: J. Lu REV NO: V.3 CHECKED: Allen Liu DATE: MAY/04/2005 DRAWN: S.H.CHEN PAGE: 1 OF 5 ERP: 1201000048

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 01/2
AA2734ESGC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	7	30	120°
	SUPER BRIGHT GREEN (Gap)	WATER CLEAR	7	30	

Note:

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions	
λpeak	Peak Wavelength	High Efficiency Red Super Bright Green	627 565		nm	IF=20mA	
λD	Dominant Wavelength	High Efficiency Red Super Bright Green	625 568		nm	IF=20mA	
Δλ1/2	Spectral Line Half-width	High Efficiency Red Super Bright Green	45 30		nm	IF=20mA	
С	Capacitance	High Efficiency Red Super Bright Green	15 15		pF	VF=0V;f=1MHz	
VF	Forward Voltage	High Efficiency Red Super Bright Green	2.0 2.2	2.5 2.5	V	IF=20mA	
lR	Reverse Current	All		10	uA	VR = 5V	

Absolute Maximum Ratings at T_A=25°C

Parameter	High Efficiency Red	Super Bright Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating/Storage Temperature	re -40°C To +85°C		

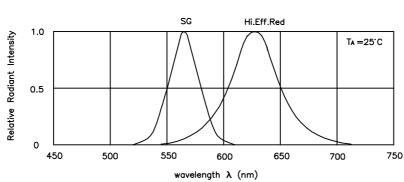
Note

 SPEC NO: DSAD1240
 REV NO: V.3
 DATE: MAY/04/2005
 PAGE: 2 OF 5

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP: 1201000048

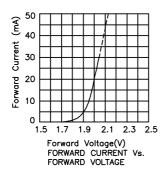
 $^{1. \}theta 1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

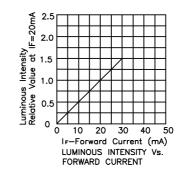
^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

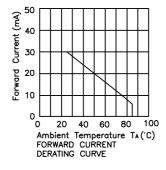


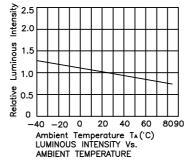
RELATIVE INTENSITY Vs. WAVELENGTH

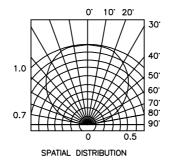
AA2734ESGC High Efficiency Red







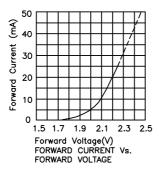


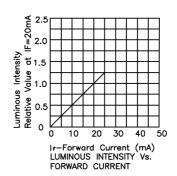


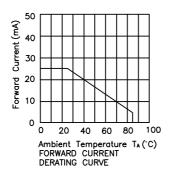
 SPEC NO: DSAD1240
 REV NO: V.3
 DATE: MAY/04/2005
 PAGE: 3 OF 5

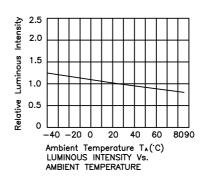
 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP: 1201000048

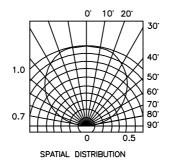
Super Bright Green







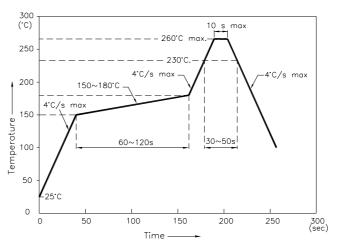




SPEC NO: DSAD1240 APPROVED: J. Lu REV NO: V.3 CHECKED: Allen Liu DATE: MAY/04/2005 DRAWN: S.H.CHEN PAGE: 4 OF 5 ERP: 1201000048

AA2734ESGC

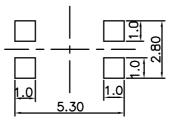
Reflow Soldering Profile For Lead-free SMT Process.



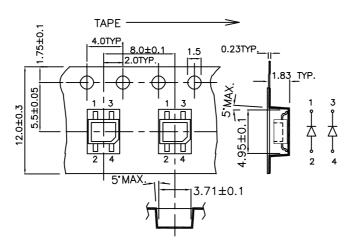
NOTES:

- 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)



Tape Specifications (Units: mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

 SPEC NO: DSAD1240
 REV NO: V.3
 DATE: MAY/04/2005
 PAGE: 5 OF 5

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP: 1201000048