

SUBMINIATURE SOLID STATE LAMP

AM2520EC08

HIGH EFFICIENCY RED

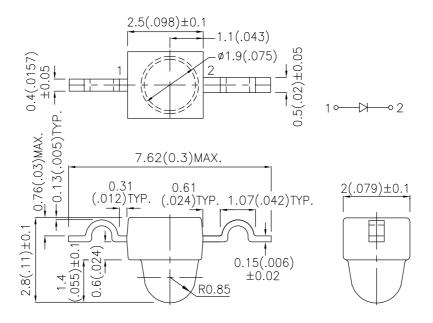
Features

- •SUBMINIATURE PACKAGE.
- •WIDE VIEWING ANGLE.
- ●YOKE LEAD.
- •LONG LIFE SOLID STATE RELIABILITY.
- •LOW PACKAGE PROFILE.
- ●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.

Package Dimensions



- All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.

 3. Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAD1264 APPROVED: J. Lu

REV NO: V.2 CHECKED: Allen Liu DATE: MAR/05/2005 DRAWN: W.J.ZHU

PAGE: 1 OF 4 ERP:1202000461

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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20 mA		Viewing Angle
			Min.	Тур.	201/2
AM2520EC08	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	10	70	20°

Electrical / Optical Characteristics at Ta=25°C

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

Absolute Maximum Ratings at Ta=25°C

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

Note:

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

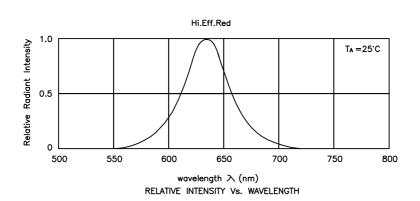
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PAGE: 2 OF 4 ERP:1202000461

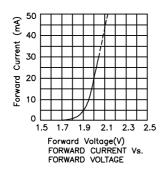
Note: 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

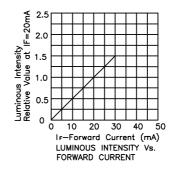
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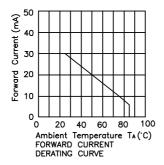


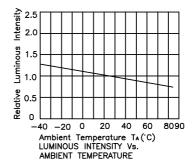
High Efficiency Red

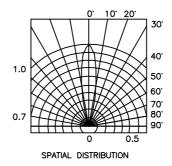
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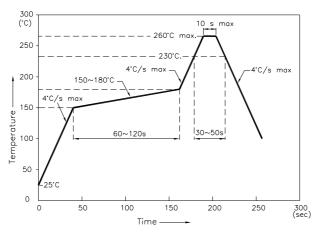


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Reflow Soldering Profile For Lead-free SMT Process.

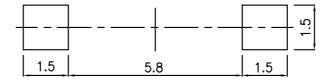


- NOTES:

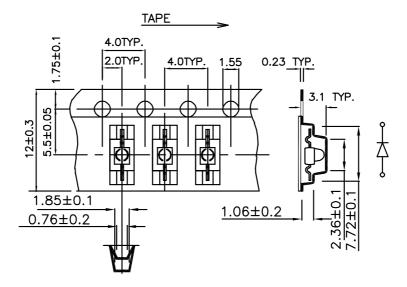
 1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
 - 2.Don't cause stress to the epoxy resin while it $\,$ is exposed to high temperature.
 - 3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern

(Units: mm)



Tape Specifications (Units: mm)



Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

SPEC NO: DSAD1264 **REV NO: V.2** DATE: MAR/05/2005 PAGE: 4 OF 4 **CHECKED: Allen Liu** APPROVED: J. Lu ERP:1202000461 DRAWN: W.J.ZHU