

3.8x2.0mm DOME LENS SMD CHIP LED LAMP

APED3820EC HIGH EFFICIENCY RED

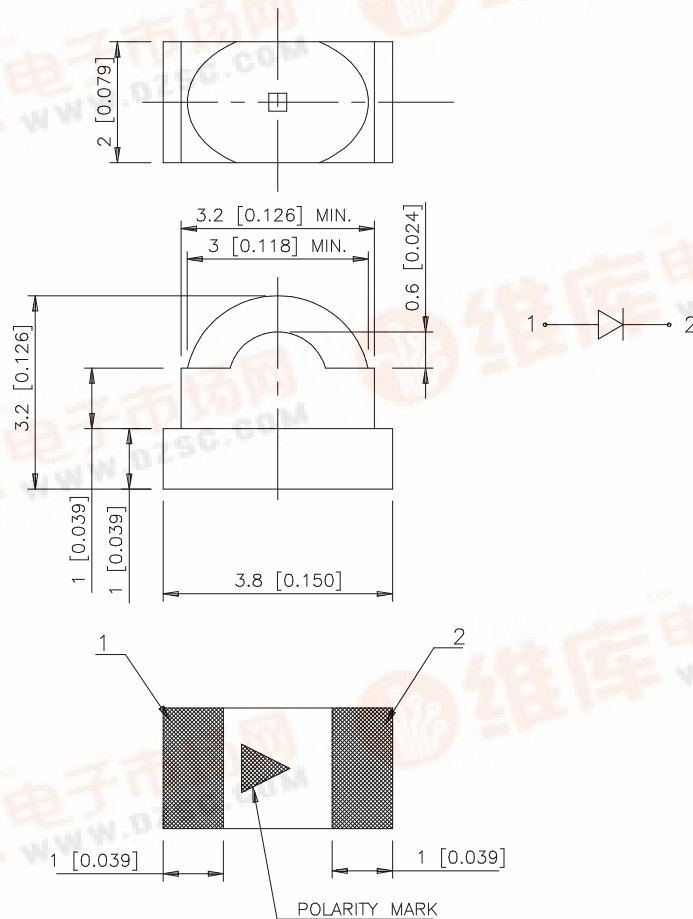
Features

- 3.8mmx2.0mm SMT LED, 3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.

Description

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

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 (0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
APED3820EC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	18	40	60° (H) 35° (V)

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

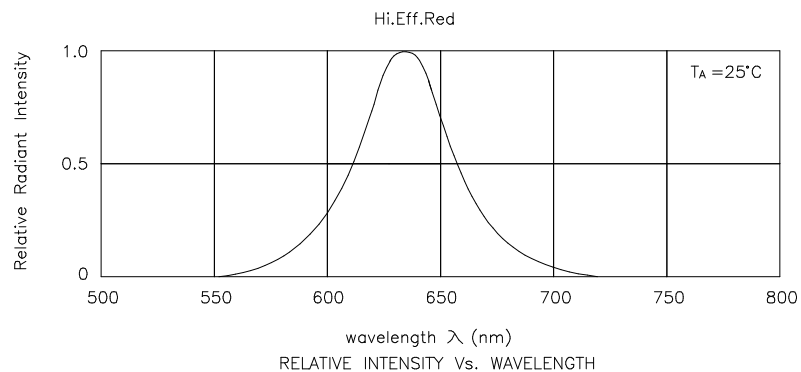
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red	627		nm	I _F =20mA
λ _D	Dominate Wavelength	High Efficiency Red	625		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	High Efficiency Red	45		nm	I _F =20mA
C	Capacitance	High Efficiency Red	15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red	2.0	2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red		10	μA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

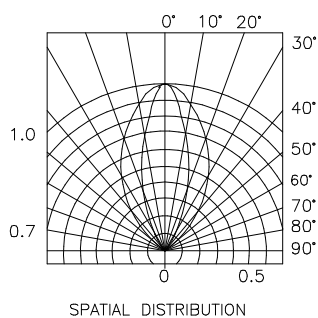
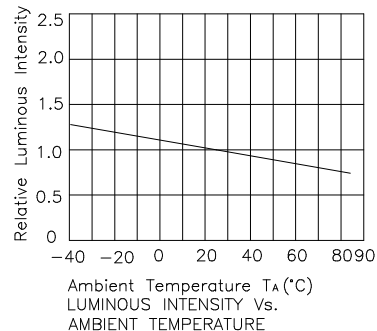
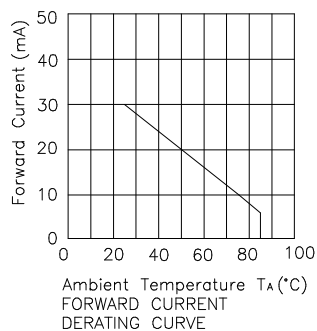
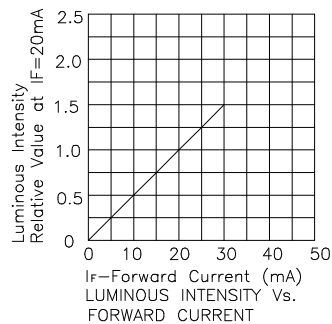
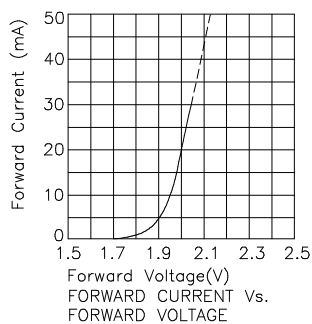
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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



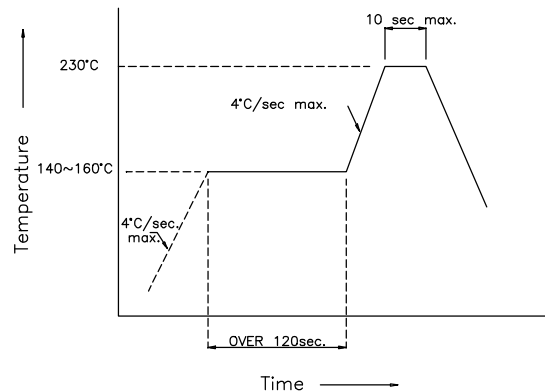
High Efficiency Red APED3820EC



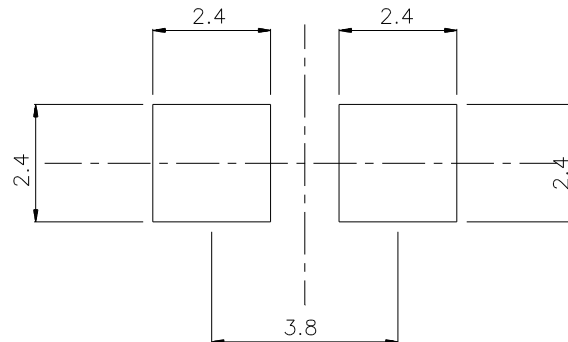
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SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)

