

Part Number: SA03-12EWA HIGH EFFICIENCY RED

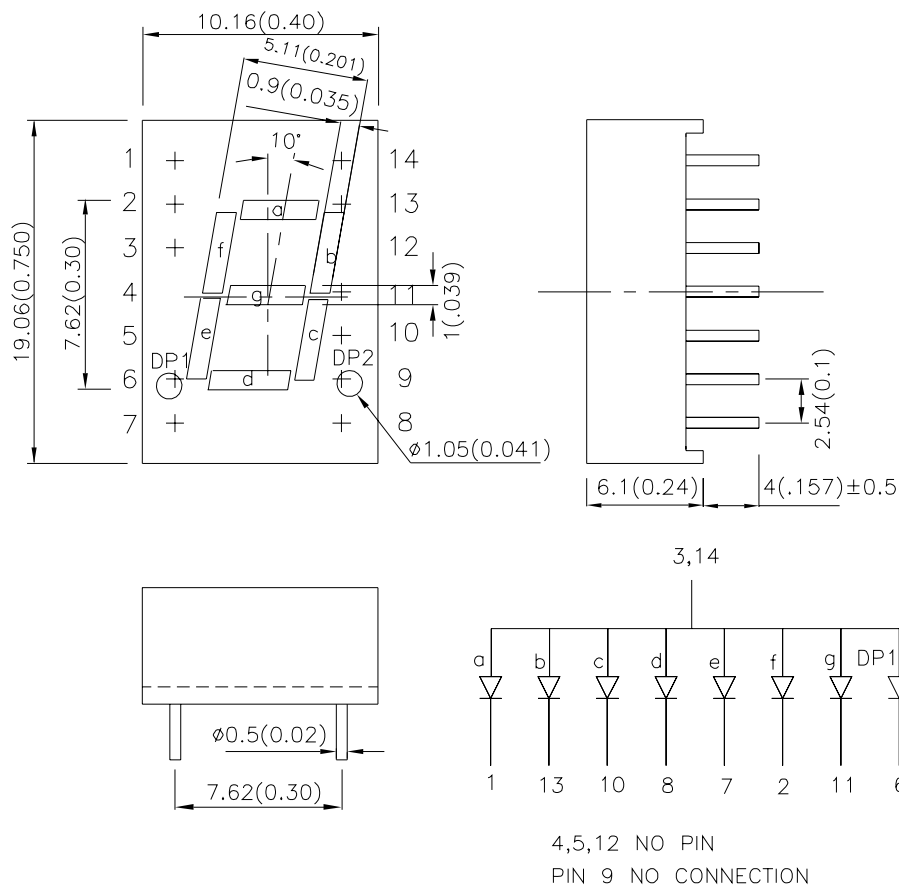
Features

- 0.3 INCH DIGIT HEIGHT.
- EXCELLENT CHARACTER APPEARANCE.
- EASY MOUNTING ON P.C . BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE SEGMENT.
- 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 & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
2. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
SA03-12EWA	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	1200	6400	Common Anode ,Lt. Hand Decimal.

Note:

1. Luminous Intensity/ Luminous Flux: +/-15%

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λ_D [1]	Dominant Wavelength	High Efficiency Red	625		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
C	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
IR	Reverse Current	High Efficiency Red		10	uA	VR = 5V

Notes:

1.Wavelength: +/-1nm

2.Forward Voltage: +/-0.1V

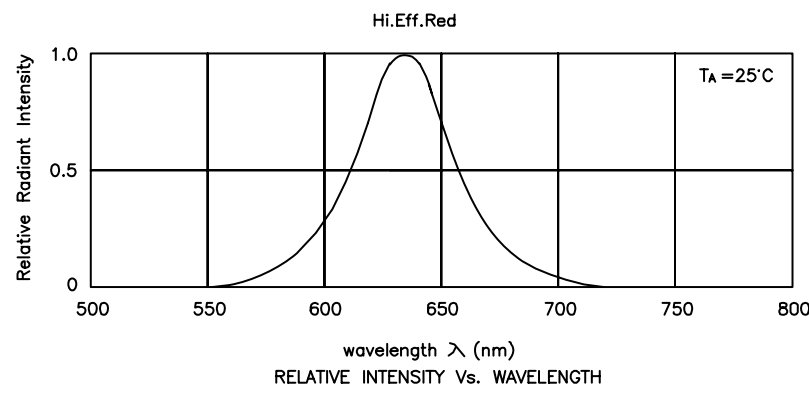
Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	

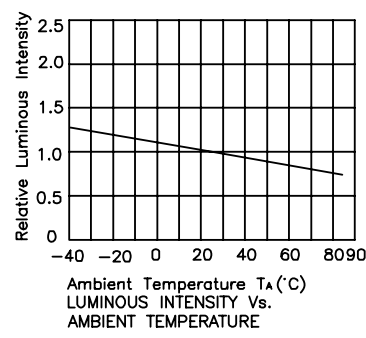
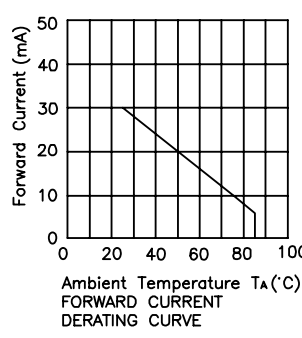
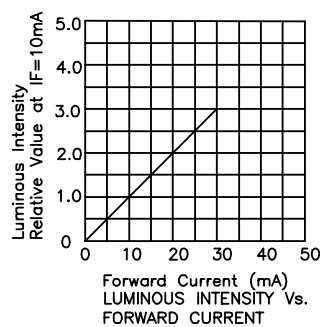
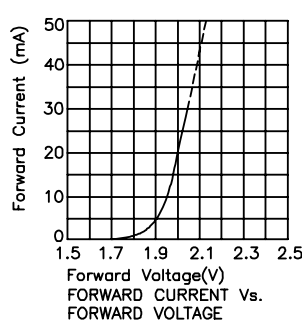
Notes:

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

2. 2mm below package base.

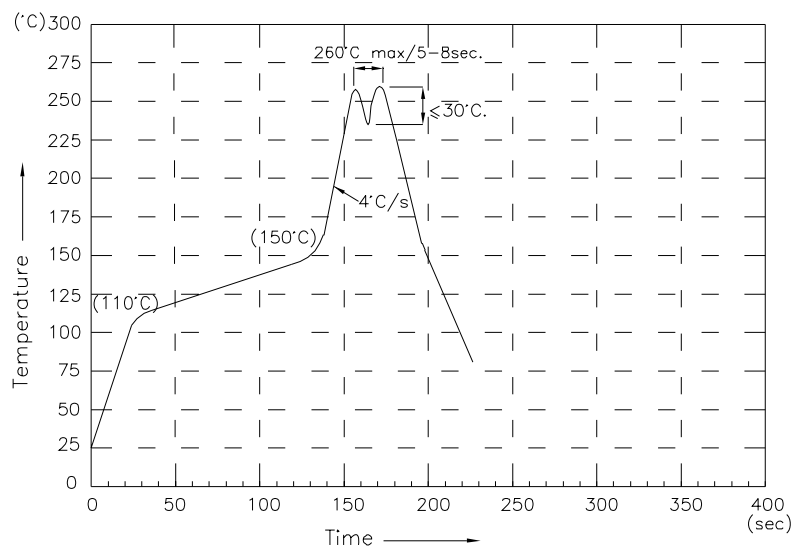


High Efficiency Red SA03-12EWA



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Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.No more than once.