

APSA56-21EWW HIGH EFFICIENCY RED

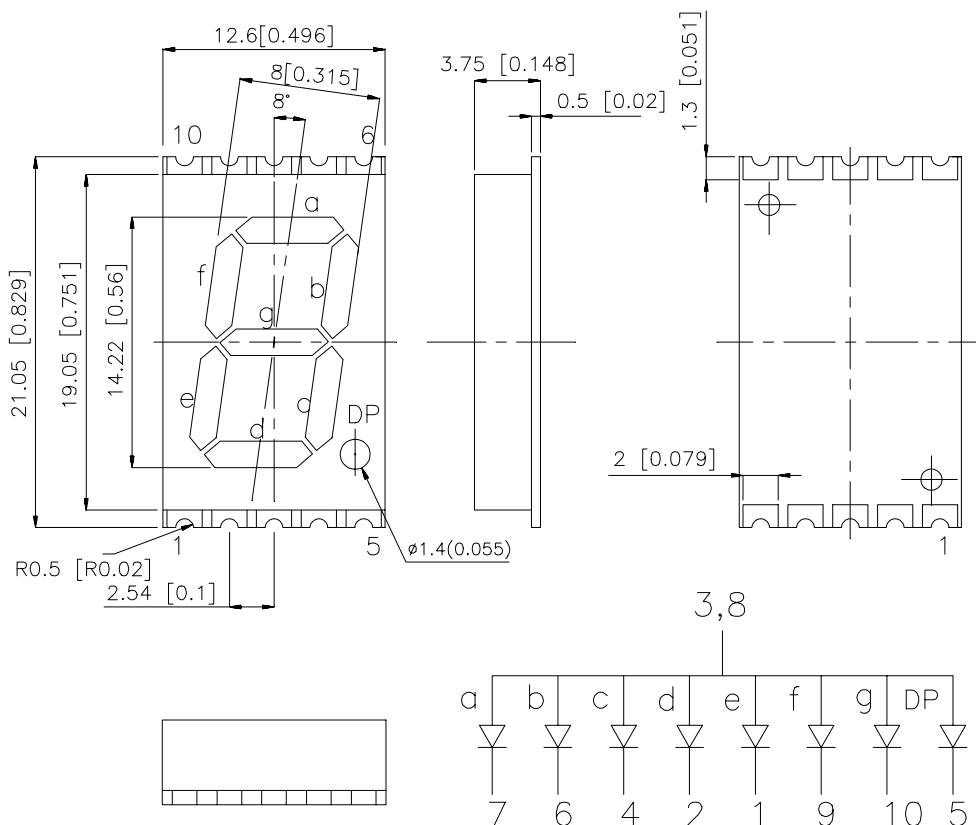
### Features

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



#### 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 lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Description
			Min.	Typ.	
APSA56-21EWW	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	4.7	8.1	Common Anode. Rt.Hand Decimal

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

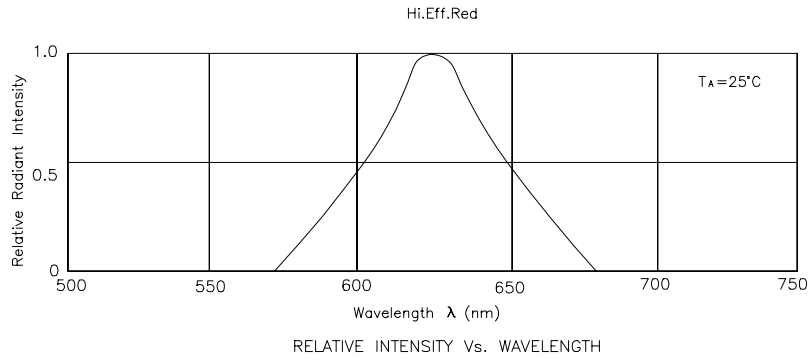
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
$\lambda_D$	Dominate Wavelength	High Efficiency Red	625		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red	45		nm	IF=20mA
C	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	High Efficiency Red		10	uA	VR = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

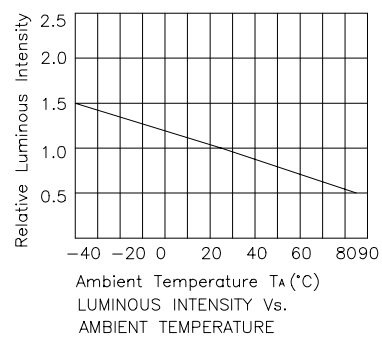
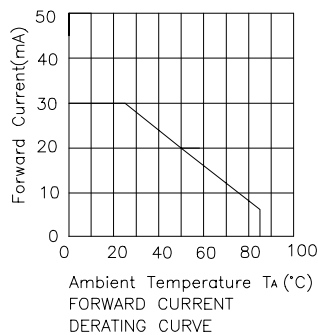
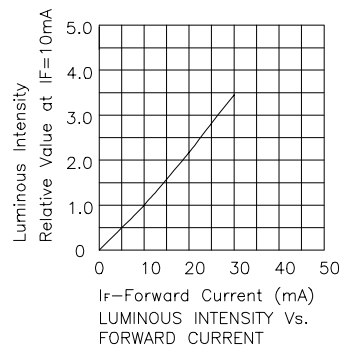
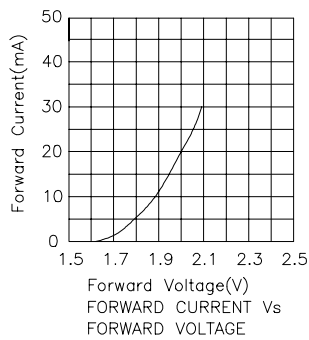
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

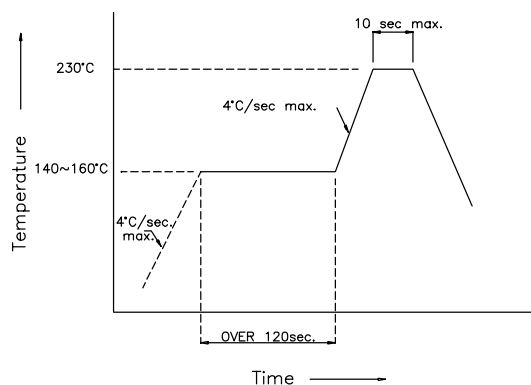


## High Efficiency Red APSA56-21EWW

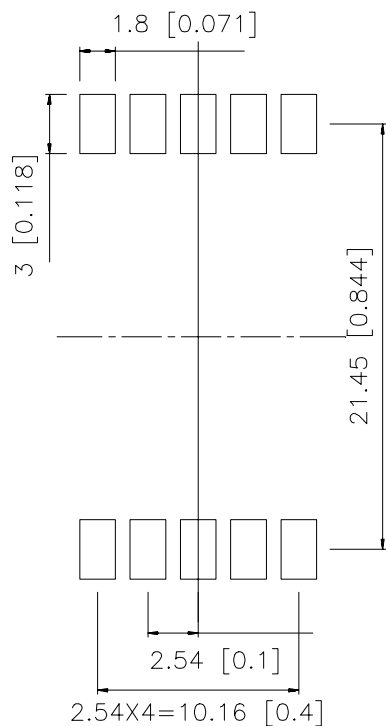


## APSA56-21EWW SMT Reflow Soldering Instruction

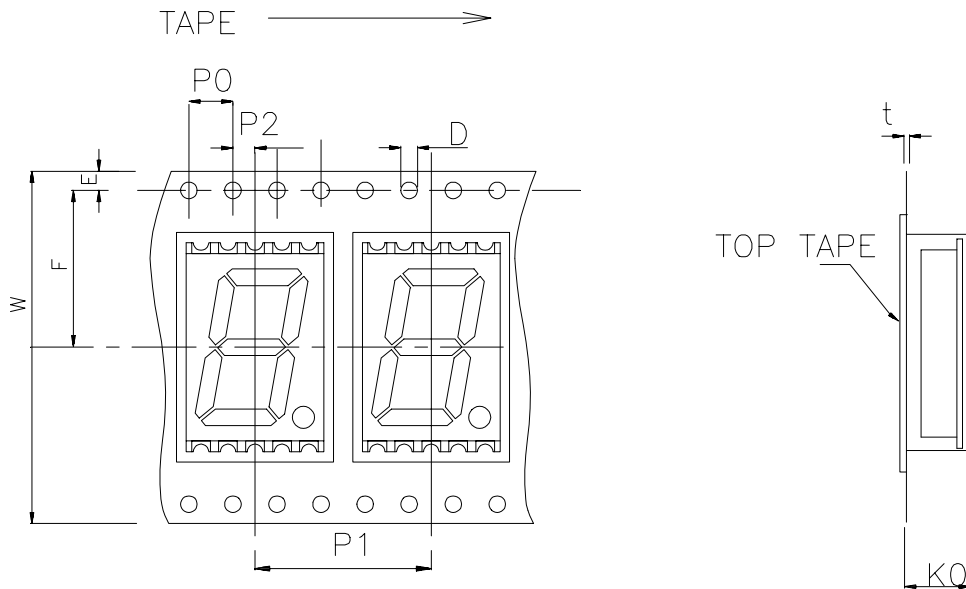
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



## Recommended Soldering Pattern (Units : mm)



**Tape Specification**  
(Units : mm)



DIMENSIONS PER MILLIMETRES(INCHES)	
D	1.55[0.06]±0.05
E	1.75±0.1(.069)
F	14.2[0.559]±0.1
P	16[0.63]TYP.
P0	4.0(.157)TYP.
P2	2.0(.079±0.02)TYP.
t	0.3[0.012]TYP.
K0	4(0.157)±0.1
W	32[1.26]±0.3