# 1206 SMD LED 60 Degree View Angle

VS 6978

Description

This lens construction of this series is different from other Flat type of SMD LED. Within the lens itself, there is an additional lens construction for better focusing of light output. Thus, increase the luminous intensity. Red, Yellow and Green emitting colors are made of high efficiency AlGaInP materials. All above carrying high luminosity under low current condition characteristics.
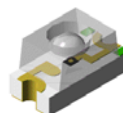
Applications

• Industrial control systems signal indicator
• Automotive features
• Front panel indicator
• Status indication

RoHS

Pb
pb-free
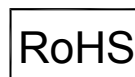
Electronic Optical Characteristics (at 20mA):

Part Number	Emitted Color	λ (nm)		Lens Color	lv(mcd)		View Angle	VF(V)	
		λ d	λ p		Min.	Typ.		Typ.	Max.
VS 6978	Orange	615	621	Clear	71	112	60	2.0	2.4

Absolute Maximum Ratings (at Ta=25℃)

P_D(mW)	IFP(mA)	IF(mA)	Iron Solder (℃)	IR(uA)@$V_{R=}$5V	Topr(℃)	Tstg(℃)
60	100*	25	350 ± 5 for 3 sec.	10	-40~+85	-40~+100

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specify ratings in this table will result degradation of LED life-span and may cause LED to fail.

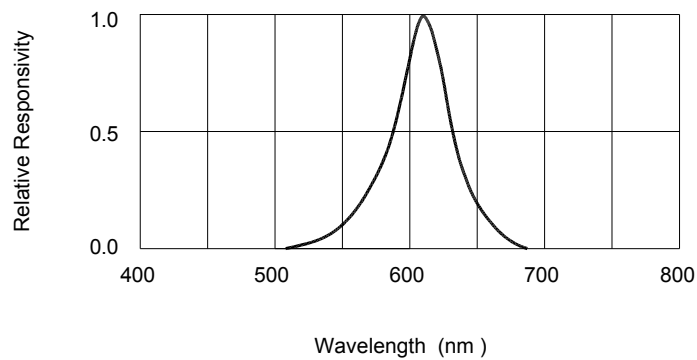＊IFP: Peak Forward Current under 1/10 duty, 1KHz condition

Package Dimension:
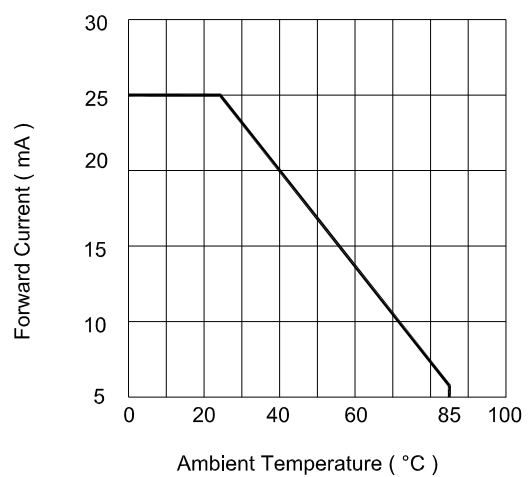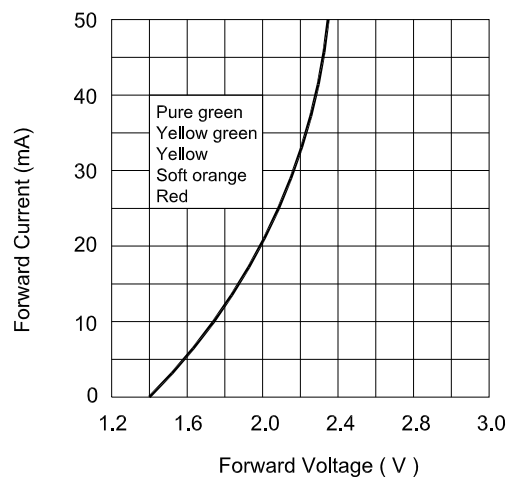
unit:mm

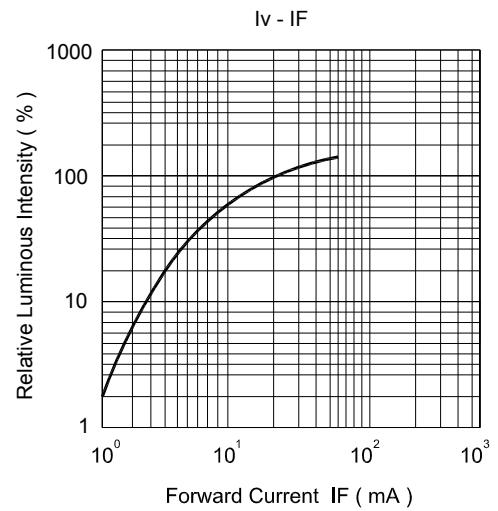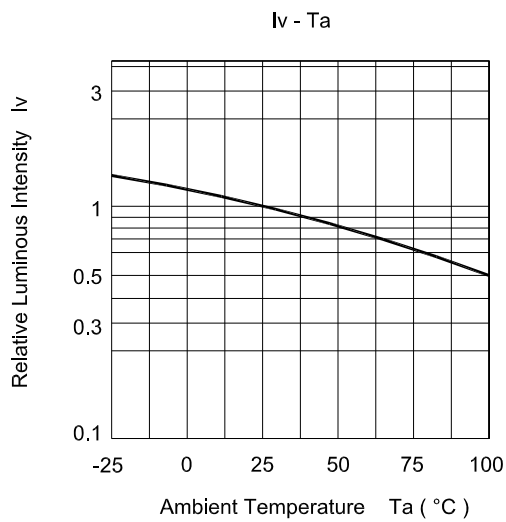

CATHODE

∅ 0.5

Polarity

−   +

Recommended Soldering Pad
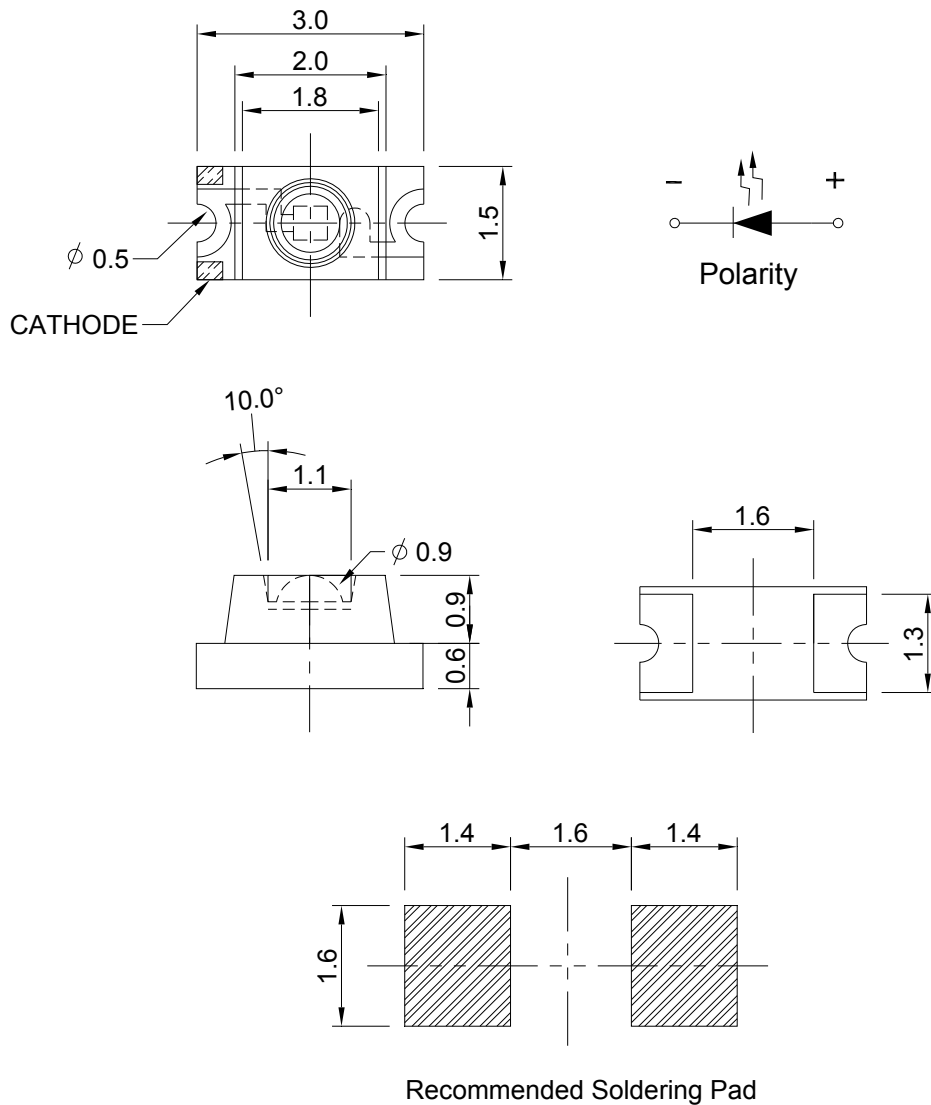
Notes:

1. All dimensions are millimeters.
2. Tolerance is ± 0.2mm unless otherwise specified.
3. Specifications are subject to change without notice.

Optical Characteristics Curves

Iv - Ta

Relative Luminous Intensity   Iv

3

1

0.5

0.3

0.1

-25   0   25   50   75   100

Ambient Temperature   Ta (°C)

Iv - IF

1000

Relative Luminous Intensity (%)

100

10

1

10^0 10^1 10^2 10^3

Forward Current IF (mA)

50

40

Forward Current (mA)

30

20

10

0

Pure green
Yellow green
Yellow
Soft orange
Red

1.2   1.6   2.0   2.4   2.8   3.0

Forward Voltage (V)

30

25

Forward Current (mA)

20

15

10

5

0   20   40   60   80   100

Ambient Temperature (°C)

1.0

Relative Responsivity

0.5

0.0

400   500   600   700   800

Wavelength (nm)

Reel Dimension:

unit : mm

Note:

Available in 8mm carrier tape on 178mm diameter reels. (3,000 pieces)

USER FEED DIRECTION

Polarity

Note:

A spacing of approximately 160mm between the front edge of tape

PRINTED LABEL

160mm Min.

Tape Dimension:

unit:mm

Polarity

Progressive direction

Recommended Pb-free re-flow soldering profile:
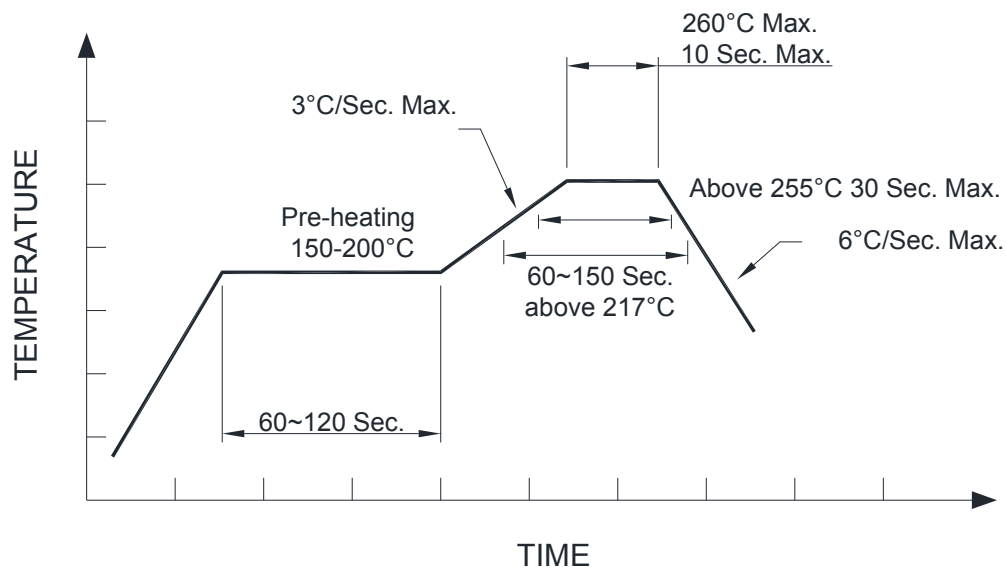
Note:

All the specifications listed in this data sheet are suitable for general electronic equipment, office equipment and communication devices. Kindly consult Sales Representatives for specific reliabilities request, Forward Voltage, Luminous Intensity, Wavelength, Radiant Power or Viewing Angle.