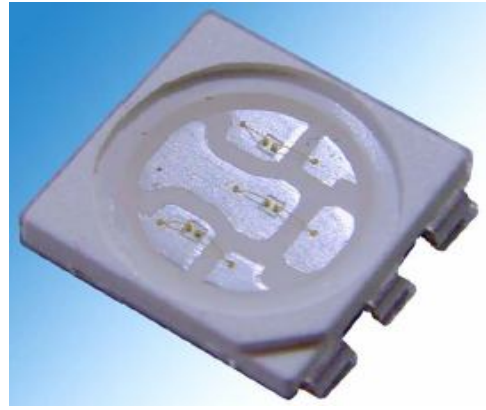


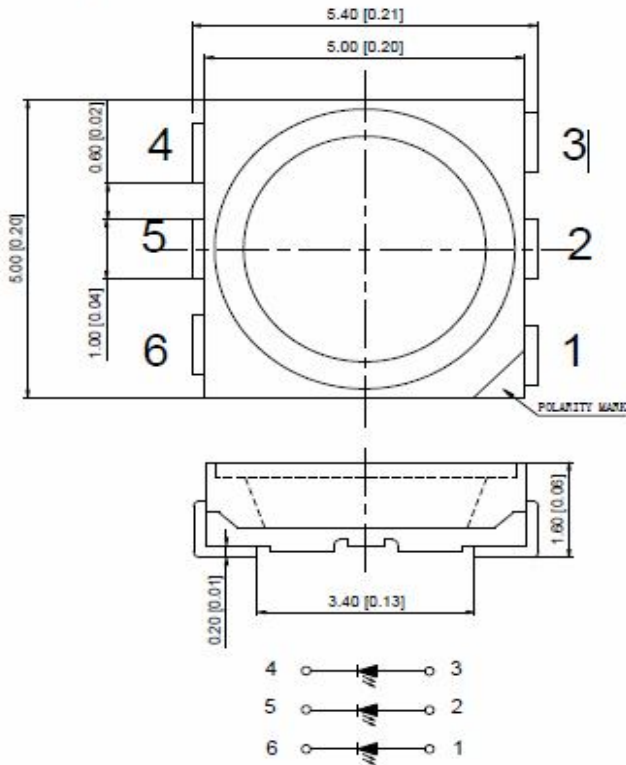
# SB-SMD-5050-red



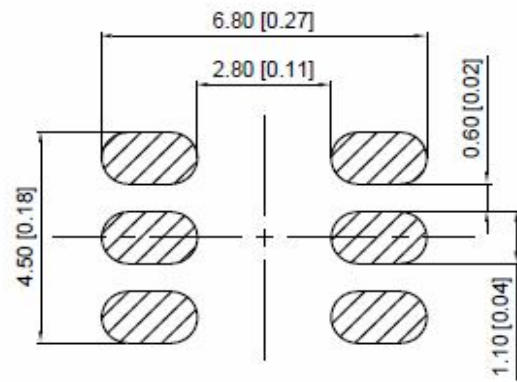
**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



## Package Dimensions



## Recommended Soldering Pattern



### Notes:

1. All dimension units are in millimeters.
2. All dimension tolerance is  $\pm 0.15$ mm unless otherwise noted.

Dice	Lens Type	Iv (mcd) @20mA*3			Viewing Angle
		Min	Typ	MAx	2 $\theta$ 1/2
Red <InGaAlP>	Water Clear	800	/	1000	120°

### Note:

1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Typ	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Red	/		/	nm	IF=20mA*3
$\lambda_D$	Dominate Wavelength	Red	615	625		nm	IF=20mA*3
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Red	/	28	/	nm	IF=20mA*3
C	Capacitance	Red	/	35	/	PF	VF=0V;f=1MHz
VF	Forward	Red	2.0		2.2	V	IF=20mA*3
IR	Reverse Current	Red	/	/	10	uA	VR=5V

### Absolute MAXimum Ratings at TA=25°C

Parameter	Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current (1)	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To + 85°C	

Note:

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

### Relative Spectral Emission

$V(\lambda)$  = Standard eye response curve

$\Phi_{rel} = f(\lambda)$ ;  $T_A = 25^\circ C$ ;  $I_F = 20mA*3$

