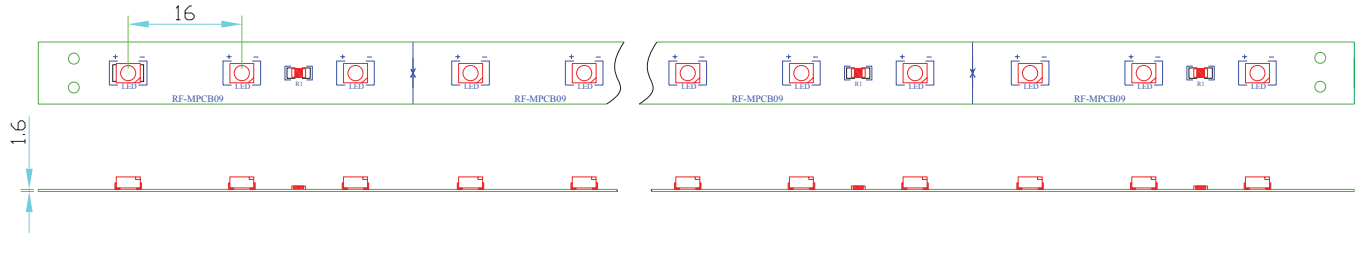
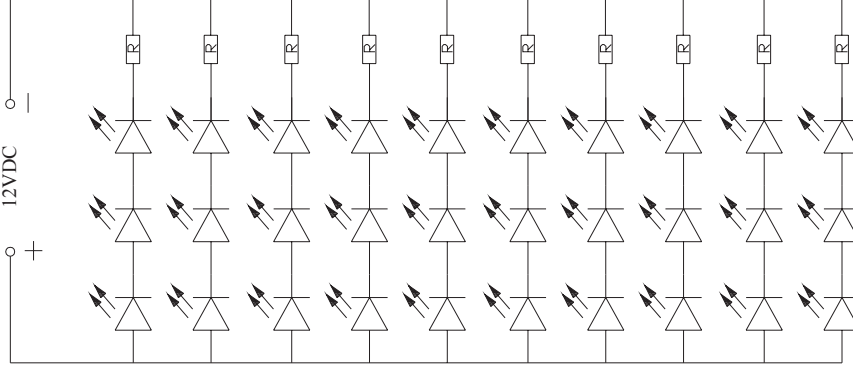


**20 mA Rigid Strip**

Size of printed circuit board (L x W x H)  
 500mm x 9mm x 1.6 mm



**Technical Features**



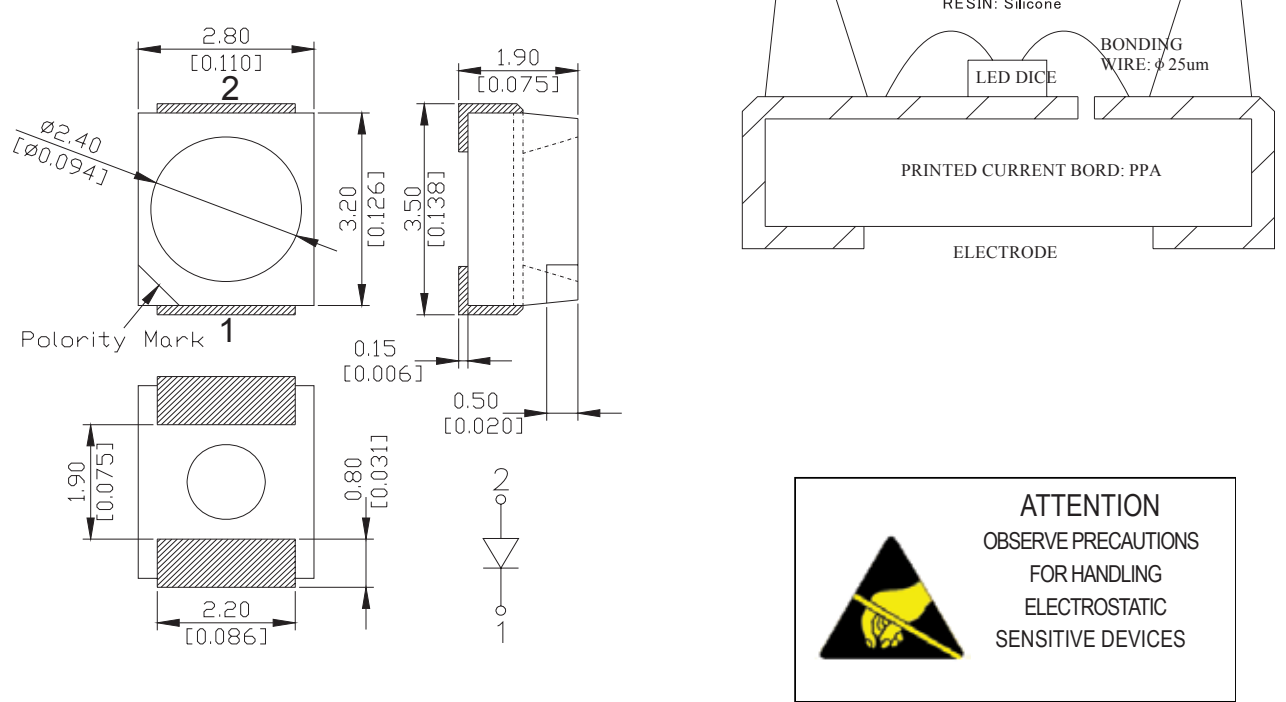
**Technical Operating Data**

Product	Color	Number of LEDs	Voltage [V DC]	Power [W]	Current [A]	Viewing angle[°]	Wave length[nm] Color temp [°]	Lum.[lm] IV[mcd]
LED500R-W	White	30	12	2.4	0.2	120	6500 K	130 lm
LED500R-WW	Warm white	30	12	2.4	0.2	120	3200 K	80 lm
LED500R-B	Blue	30	12	2.4	0.2	120	465 nm	9 lm
LED500R-G	Green	30	12	2.4	0.2	120	525 nm	60 lm
	Yellow	30	12	2.4	0.2	120	588 nm	36 lm
	Orange	30	12	2.4	0.2	120	625 nm	36 lm

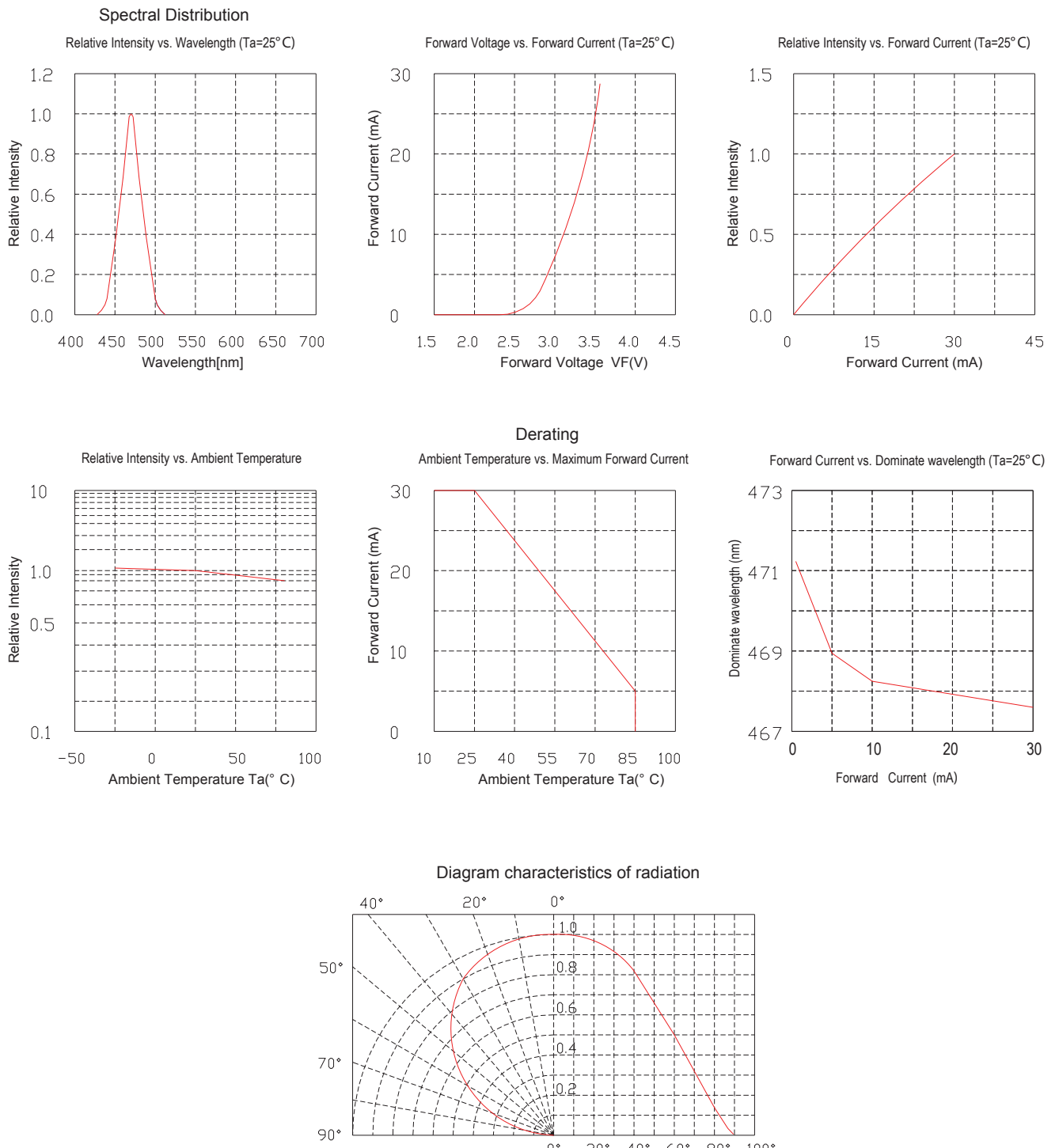
**Feature**

- ◆ Viewing angle:120 deg
- ◆ The materials of the LED dice is InGaN
- ◆ 3.50mm×2.80mm×1.90mm SMT-LED
- ◆ RoHS compliant lead-free soldering compatible

**Package Outline**



**Typical optical characteristics curves**



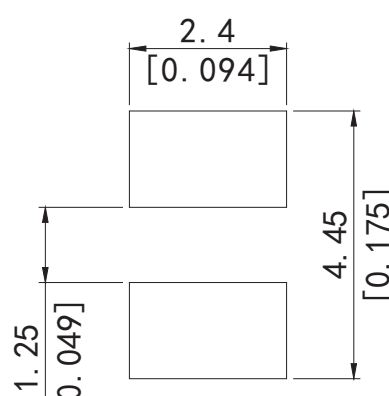
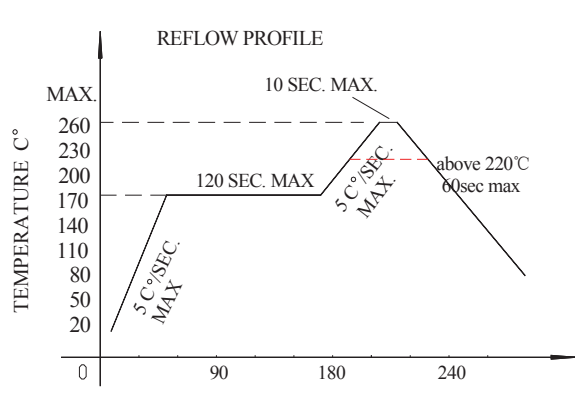
**Reflow profile**

- Soldering condition
- Recommended soldering conditions

Reflow Soldering		Hand Soldering	
Pre-heat	160~180°C	Temperature	300°C Max.
Pre-heat time	120 seconds Max.	Soldering time	3 second Max. (one time only)
Peak temperature	260°C Max.		
Soldering time	10 seconds Max.		
Condition	Refer to Temperature-profile		

- After reflow soldering rapid cooling should be avoided
- Temperature-profile (Surface of circuit board)  
 Use the following conditions shown in the figure.

**RECOMMEND PAD DESIGN (Units: mm)**



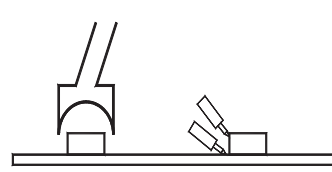
1. Reflow soldering should not be done more than two times
2. When soldering ,do not put stress on the LEDs during heating

■ Soldering iron

1. When hand soldering, keep the temperature of the iron under 300 °C, and at that temperature keep the time under 3 sec.
2. The hand soldering should be done only a time
3. The basic spec is ≤5 sec. when the temperature of 260 °C, do not contact the resin when hand soldering

■ Rework

1. Customer must finish rework within 5 sec under 260 °C
2. The head of iron can not touch the resin
3. Twin-head type is preferred.



■ CAUTIONS

The encapsulated material of the LEDs is silicone . Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when using the picking up nozzle, the pressure on the silicone resin should be proper