

# LED

**SIDE VIEW 1206**  
**1.0 mm HIGH**

## ADVANTAGES

- Easy to place size versus other packaging
- Market standard tape & reel for automated pick & place machines
- Can be run at lower current levels

## FUNCTIONALITIES

- Specific DESIGN for Printed Conductive Ink

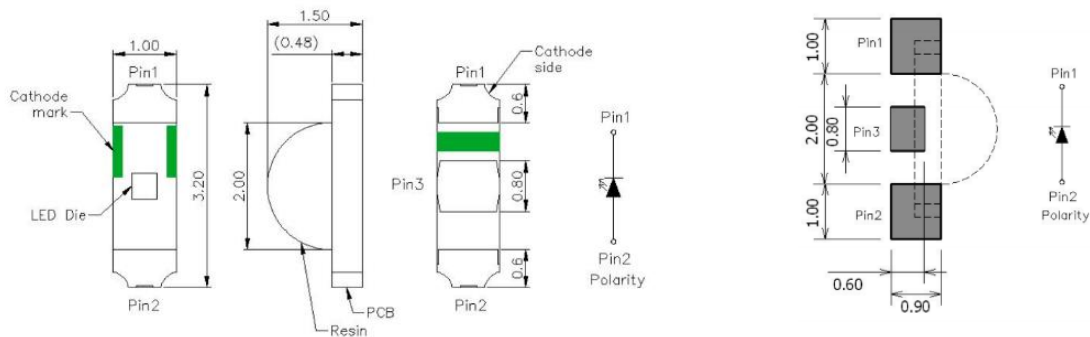
# TECHNICAL DATA

## ELECTRO-OPTICAL CHARACTERISTICS ( $I_F=20\text{mA}$ / $T_a=25^\circ\text{C}$ )

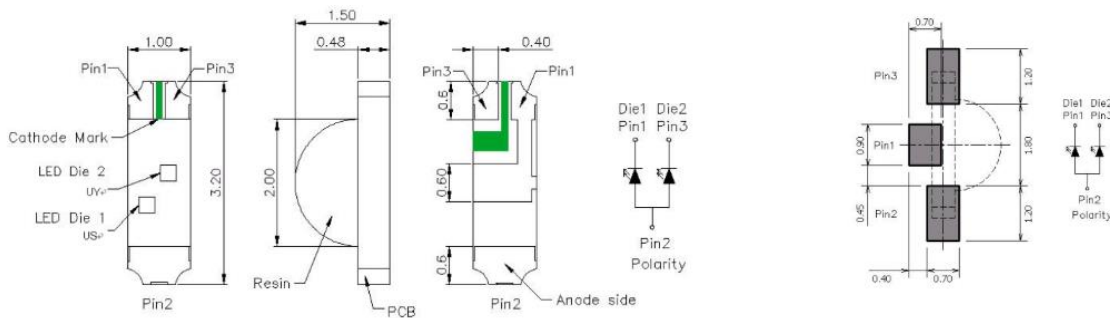
Part Number	Lens Type	Emitting Color	Die Material	Dominant Wavelength $\lambda_d$ (nm)	Luminous Intensity $I_v$ (mcd)		Viewing angle (deg)
					Min.	Typ.	
STERGB100W-10	Water Clear	Red	AlInGaP	622	370	450	X=118, Y=145
		Green		523	800	1000	X=125, Y=128
		Blue		465	130	170	X=124, Y=136
SBEREY100W-10	Water Clear	Red	AlInGaP	624	45	112.5	X=130, Y=100
		Yellow		589			X=124, Y=115
SBEYEG100W-10	Water Clear	Yellow	AlInGaP	589	45	71.5	X=130, Y=100
		Green		571			X=124, Y=115
SBEREG100W-10	Water Clear	Red	AlInGaP	624	45	112.5	X=130, Y=100
		Green		571			X=124, Y=115
SZEG100W-10	Water Clear	Green	AlInGaP	571	28.5	71.5	X=140, Y=115
SZER100W-10	Water Clear	Red	AlInGaP	631	28.5	71.5	X=140, Y=116
SZEO100W-10	Water Clear	Orange	AlInGaP	605	45	71.5	X=140, Y=115
SZEY100W-10	Water Clear	Yellow	AlInGaP	589	45	112.5	X=140, Y=116
SZEB100W-10	Water Clear	Blue	InGaN	470	112.5	180	X=140, Y=116
SZEW100D-10	Yellow Diffused	White	InGaN	-	360	510	X=130, Y=140

## PACKAGE DIMENSION & RECOMMENDED SOLDER PATTERN

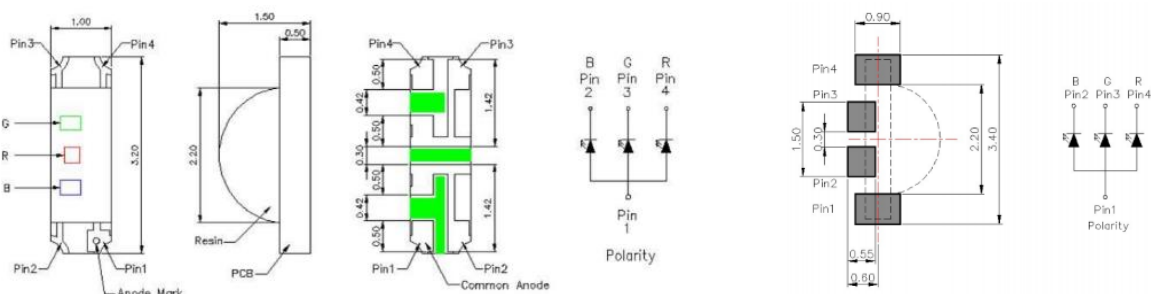
### Mono-color



### Bi-color type

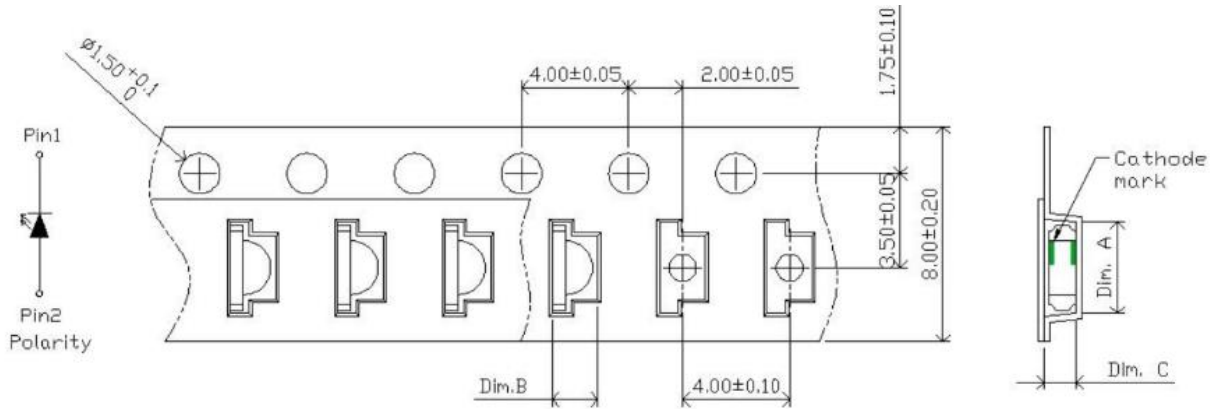


### Tri-color type



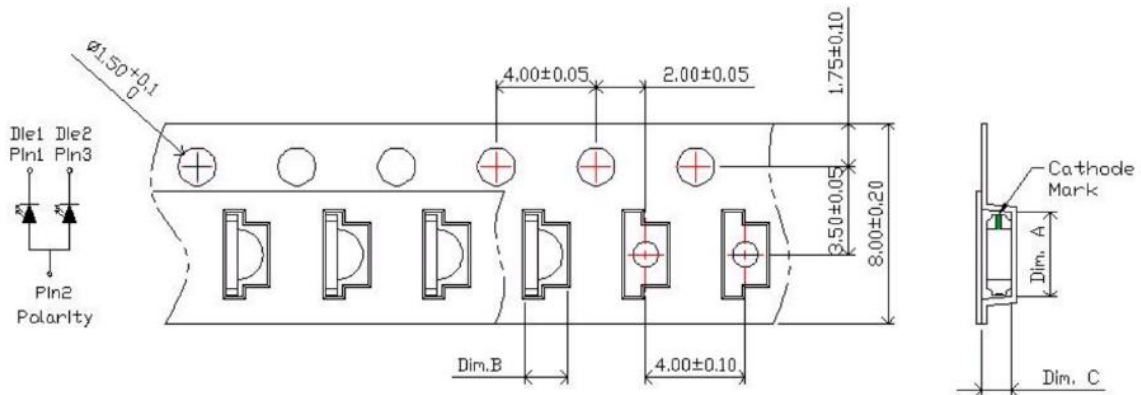
# CARRIER TAPE DIMENSION

## Mono-color tape



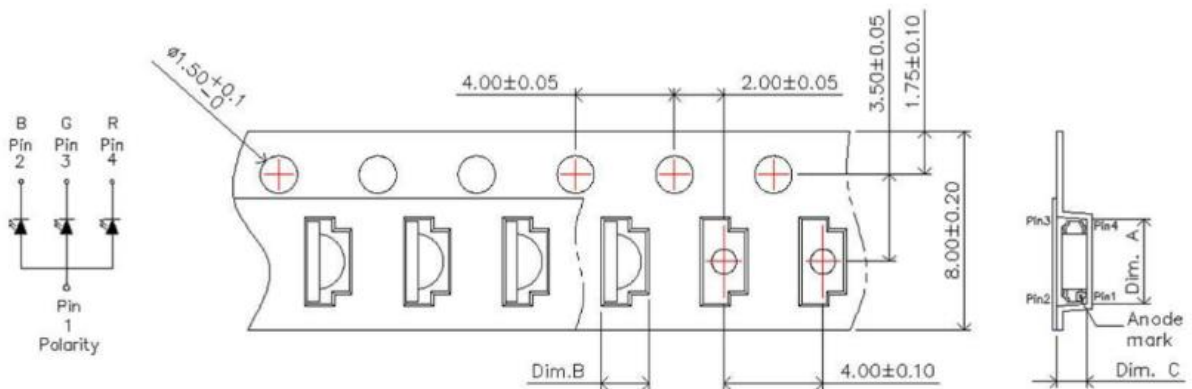
Dim. A	Dim. B	Dim. C	Q'ty/Reel
3.40±0.10	1.70±0.10	1.20±0.10	3K

## Bi-color tape



Dim. A	Dim. B	Dim. C	Q'ty/Reel
3.40±0.10	1.70±0.10	1.20±0.10	3K

## Tri-color tape



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# TECHNICAL DATA

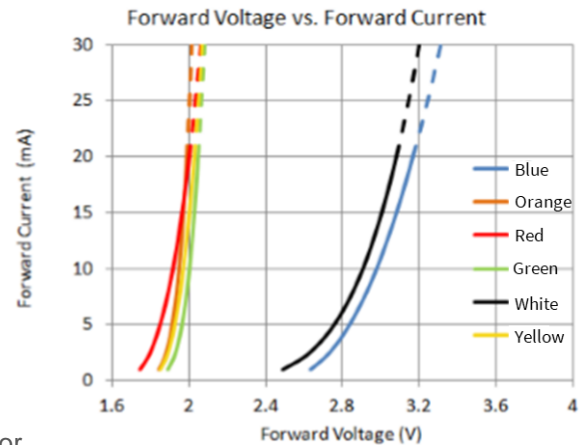
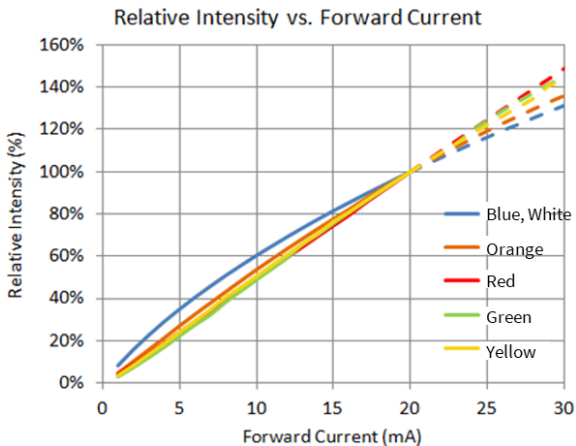
## PRODUCT CHARACTERISTICS (ABSOLUTE MAXIMUM RATINGS)

	Red / Orange / Yellow / Green	Blue White	Bi-Color	RGB
Reverse voltage $V_R$	5V			
Forward current $I_F$	20 mA	20 mA	20 mA	20 mA
Peak Forward Current $I_{FP}$ (Duty 1/10 @ 1KHz)	40 mA	60 mA	40 mA	R: $\leq 60$ G: $\leq 30$ B: $\leq 30$
Power Dissipation $P_d$	48 mW	78 mW	48 mW	R: 45 G: 56 B: 60
Electrostatic Discharge (ESD)	2000 V	200 V	2000 V	200 V
Operating temperature $T_{opr}$	-40°C to +85°C			
Storage temperature $T_{stg}$	-40°C to +100°C			
Soldering temperature $T_{sol}$	217°C for 60~150 sec. 260°C for 10sec Max.			

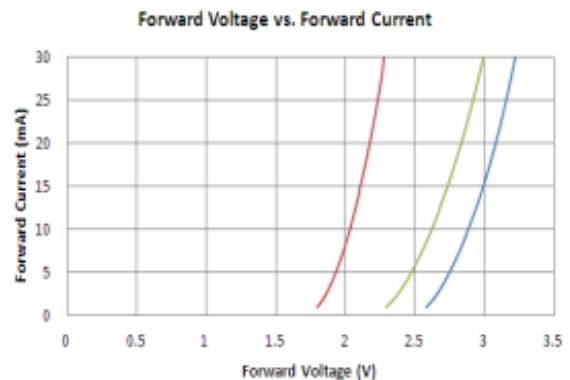
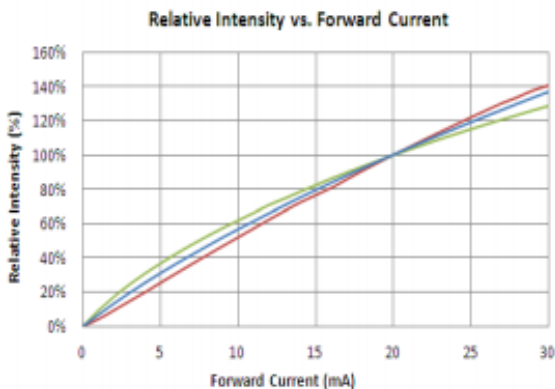
**WARNING**

Tolerances:  
 • Luminous Intensity ( $I_v$ ):  $\pm 11\%$   
 • Dominant Wavelength ( $\lambda_d$ ):  $\pm 1nm$   
 • Forward Voltage ( $V_f$ ):  $\pm 0.1V$

### Mono-color, Bi-color



### Tri-color



## OTHER INFORMATION

### PRECAUTIONS FOR USE

**WARNING**

#### Electrostatic Discharge (ESD) protection



The symbol to the left denotes that ESD precaution is needed. ESD protection for GaP and AlGaAs based chips is necessary even though they are relatively safe in the presence of low static-electric discharge. Parts built with AlInGaP, GaN, or/and InGaN based chips are **STATIC SENSITIVE devices**. **ESD precaution must be taken during design and assembly**. If manual work or processing is needed, please ensure the device is adequately protected from ESD during the process.