

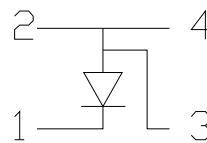
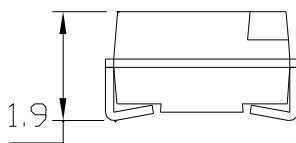
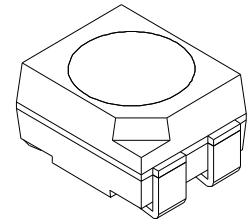
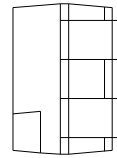
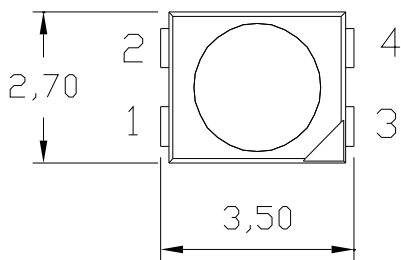
**Features:**

- Package: white PLCC-4 package
- Small package with high efficiency
- Color coordinates:  $x=0.33, y=0.33$  according to CIE 1931
- Thermal resistance: 80K/W
- ESD protection, 2KV HBM
- Soldering methods: SMT

**Applications:**

- Interior automotive lighting
- Backlighting
- Reading lamp
- Decorative and entertainment lighting

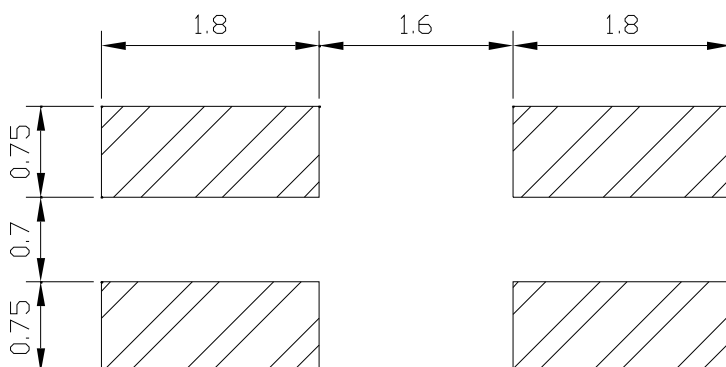
**1. Mechanical Dimensions**



**Notes:**

1. Unit: mm
2. Drawings are not to scale.
3. All dimensions are in millimeter.
4. General tolerance is 0.2mm.

## Recommended Solder Pad



### Notes:

1. Unit: mm
2. Drawings are not to scale.
3. All dimensions are in millimeter.
4. General tolerance is 0.1mm.

## 2. Absolute Maximum Ratings

Parameter	White series
	Value
DC Forward Current (mA)	150
Peak Pulse Current (mA)	180
LED Junction Temperature	125°C
LED Operating Temperature	-40 °C~110°C
Storage Temperature	-40°C ~120°C
Soldering Temperature	Max 260°C
ESD Sensitivity	2000V HBM
Reverse Voltage	Not design to be driven in reverse bias
	( $V_R \leq 5V$ )

### 3. General Characteristics at 150mA

#### 3.1 Luminous Flux at 150mA, $T_a=25^{\circ}\text{C}$

Color	Part Number	Luminous Flux(lm)		Light Pattern
		Minimum	Typical	
Daylight	VAOS -SP4W4	20	25	Lambertian

**Notes:**

- Luminous flux measurement accuracy is 10%

#### 3.2 Optical Characteristics at 150mA, $T_a=25^{\circ}\text{C}$

Light Pattern	Color	Correlated Color Temperature CCT			Spectral Half-width (nm)	Temperature Coefficient of $\lambda_d$ (nm/ $^{\circ}\text{C}$ )	Viewing Angle Degree
		Dominant Wavelength $\lambda_d$ or Peak Wavelength $\lambda_p$					
		Min.	Typ.	Max.	$\Delta\lambda_{1/2}$	$\Delta\lambda_d/\Delta T_j$	$2\theta_{1/2}$
Lambertian	Daylight	5000 K	6300 K	7000 K	--	--	120

**Notes:**

- CCT measurement accuracy of 200K.

#### 3.3 Electrical Characteristics at 150mA, $T_a=25^{\circ}\text{C}$

Light Pattern	Color	Forward Voltage $V_F$ (V)			Temperature Coefficient of $V_F$ (mV/ $^{\circ}\text{C}$ )	Thermal Resistance Junction to lead ( $^{\circ}\text{C}/\text{W}$ ) $R\theta_{J-L}$
		Min.	Typ.	Max.		
Lambertian	Daylight		3.5	3.8	-3	

**Notes:**

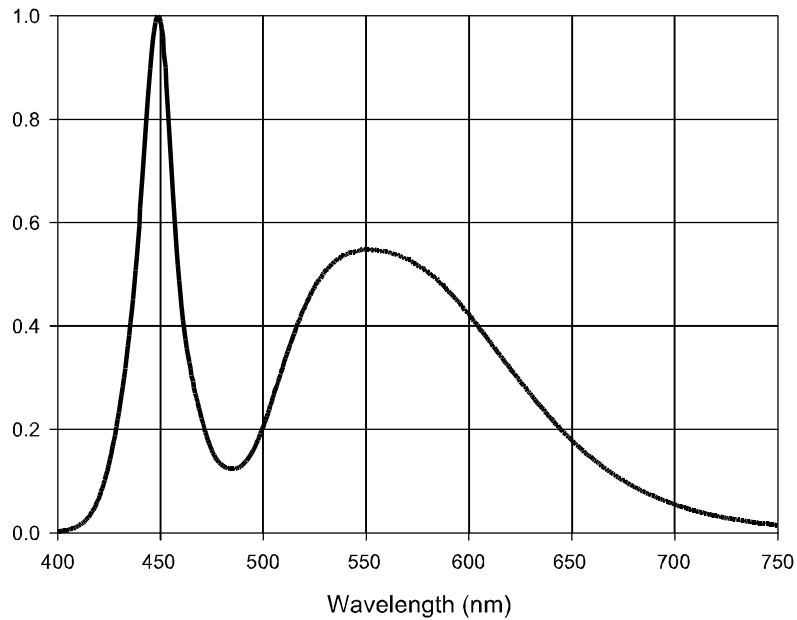
- $V_f$  measurement accuracy of 0.1V.

Specific binning requirements- please contact our home office

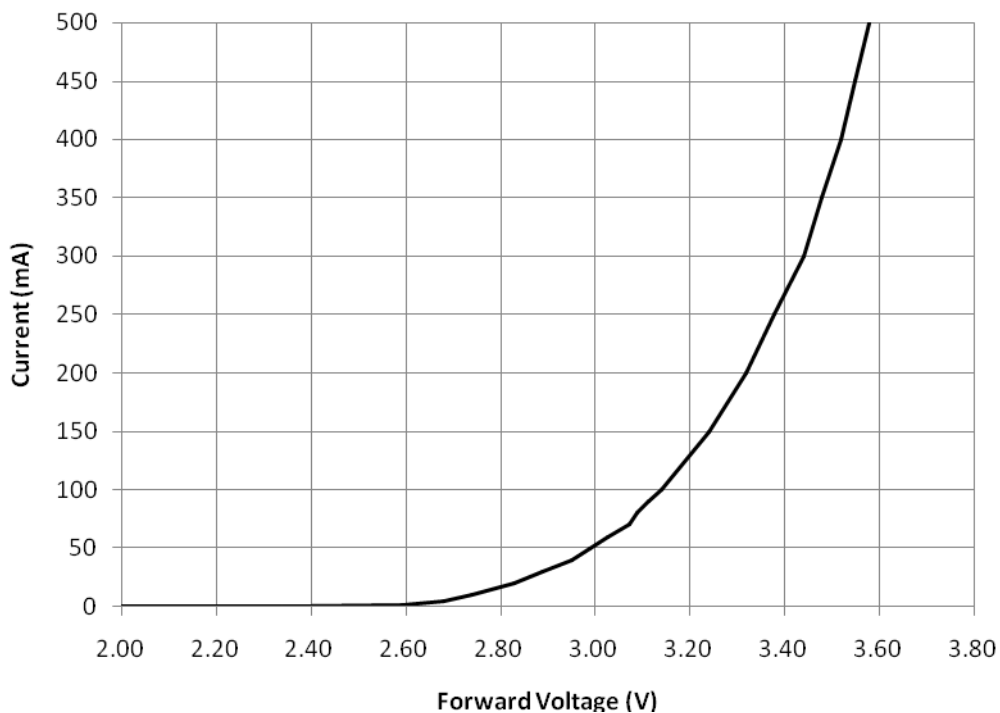


## 4. Wavelength Spectrum, $T_a=25^\circ\text{C}$

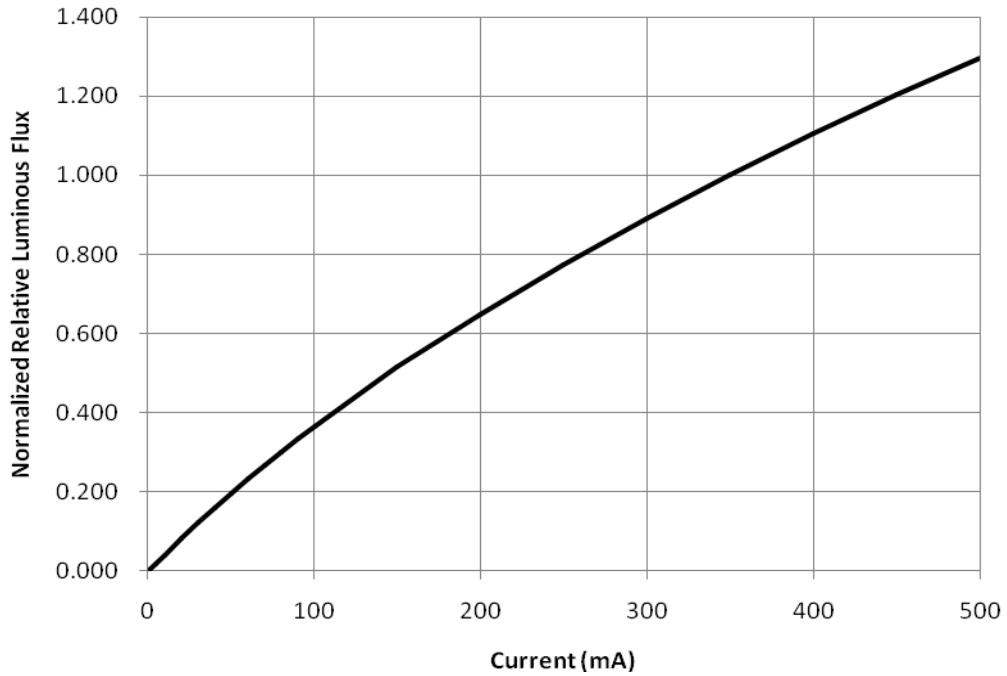
### 4.1 Daylight



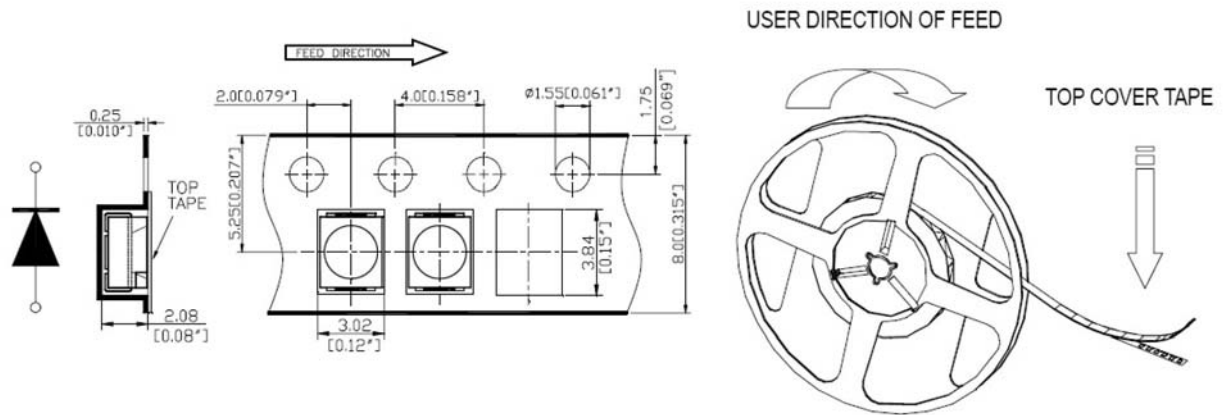
## 5. Forward I-V Characteristics



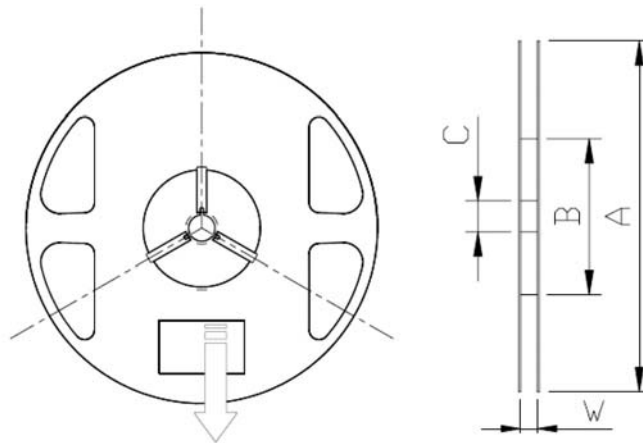
## 6. Forward L-I Characteristics



## 7 Packing Information



Dimensions per ANSI/EIA Standard RS-481 All dimensions are in Millimeters (inches).	
A	180[7.09]
B	60[2.36]
C	13.5[0.53]
W	8.4[0.33]
Thickness of top cover tape 0.1[0.004] MAX	



1. The cathodes is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications.
2. 2000pcs/Reel