



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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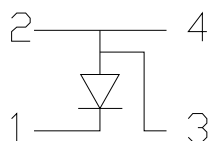
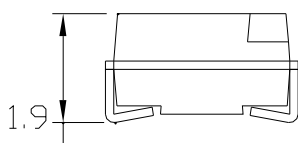
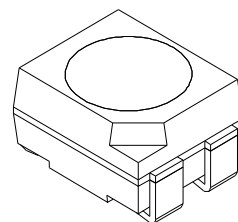
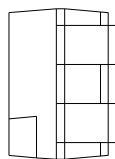
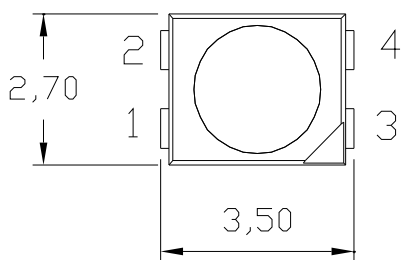
Features:

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

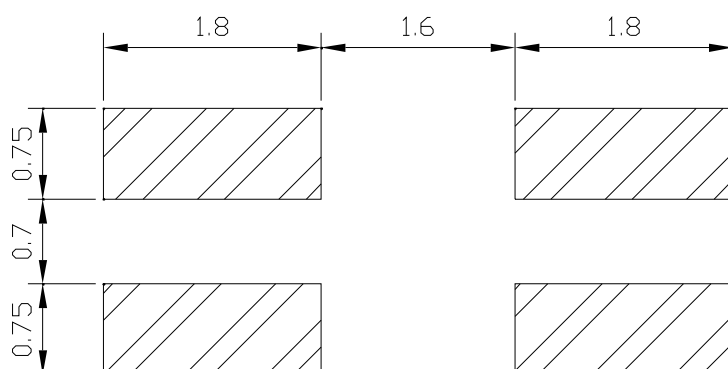
1. Mechanical Dimensions



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

Notes:

1. Luminous flux measurement accuracy is 10%

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

Light Pattern	Color	Dominant Wavelength λ_d			Spectral	Temperature	Viewing
		Peak Wavelength λ_p or			Half-width	Coefficient of	Angle
		Correlated Color Temperature CCT			(nm)	λ_d (nm/ $^{\circ}\text{C}$)	Degree
		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:

1. CCT measurement accuracy of 200K.

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

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

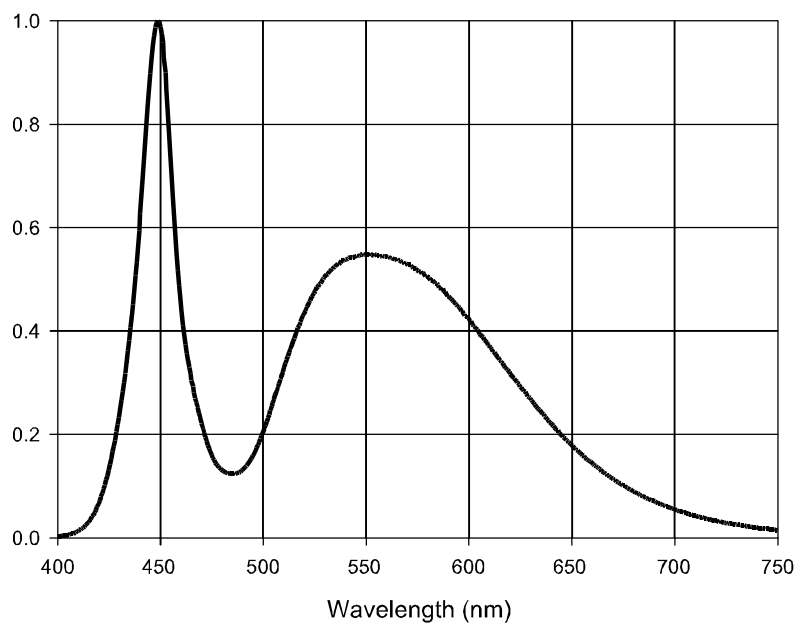
Notes:

1. V_f measurement accuracy of 0.1V.

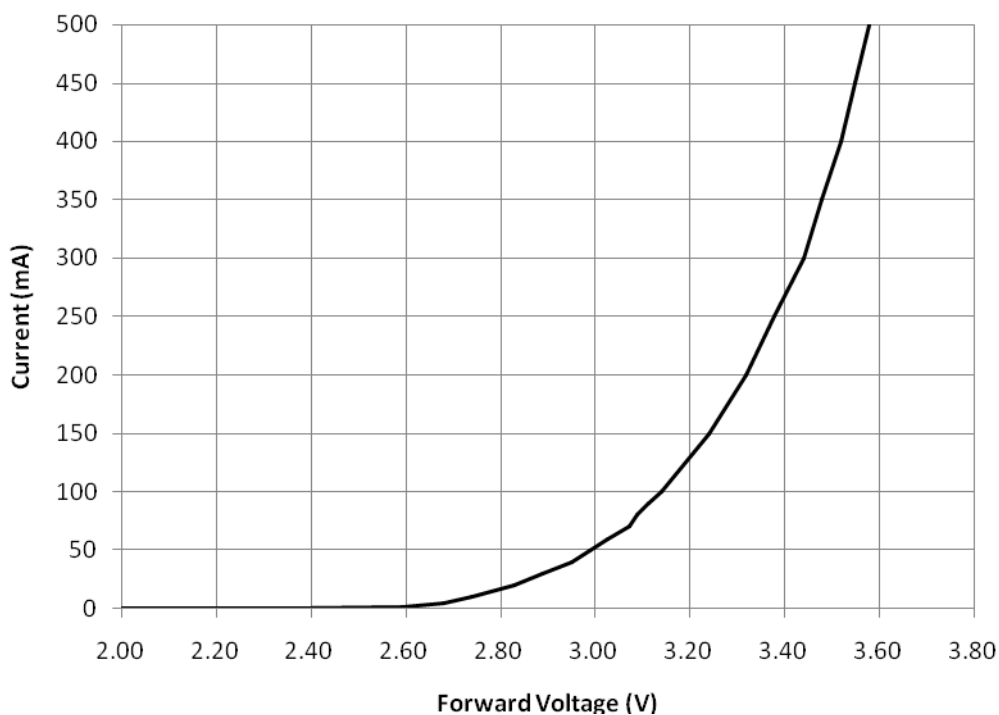
Specific binning requirements- please contact our home office

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

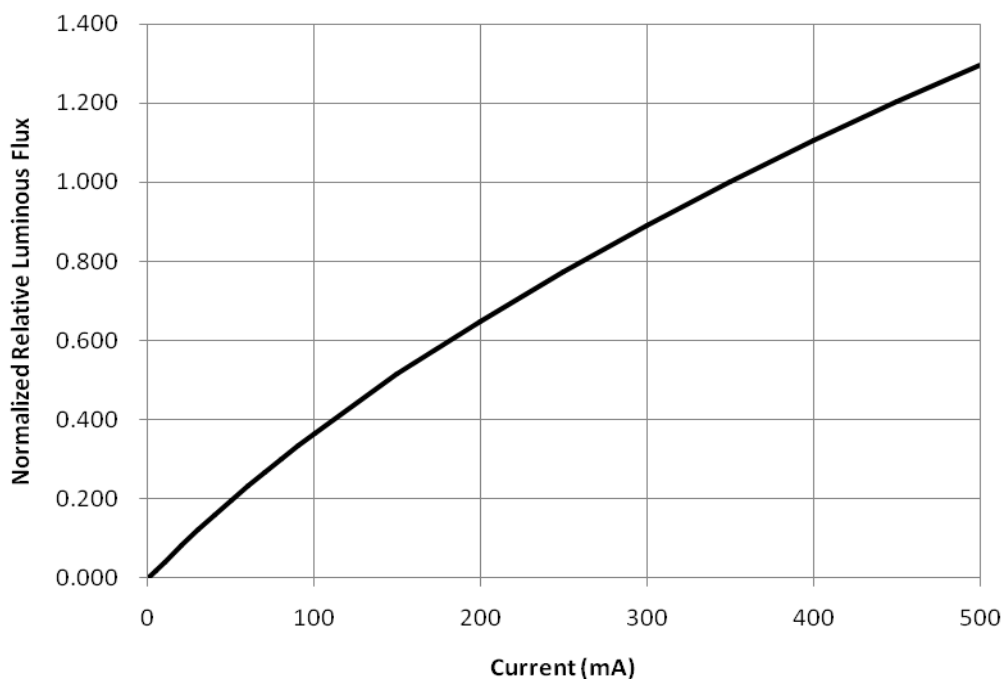
4.1 Daylight



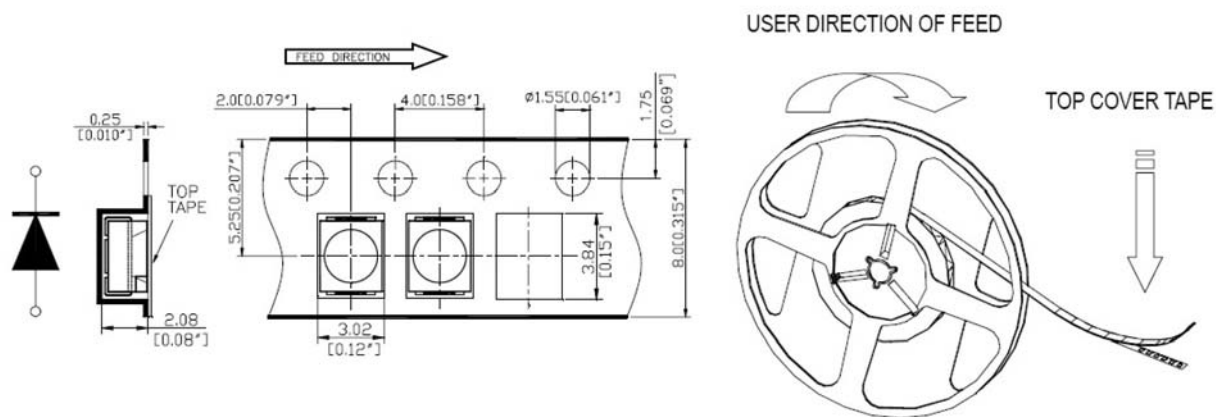
5. Forward I-V Characteristics



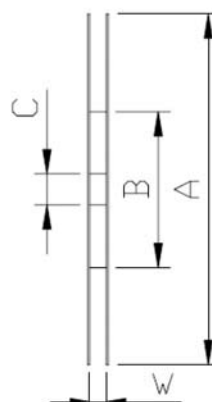
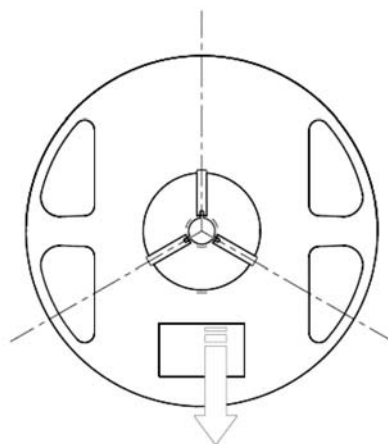
6. Forward L-I Characteristics



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