

CURRENT REGULATIVE LED

CRLED

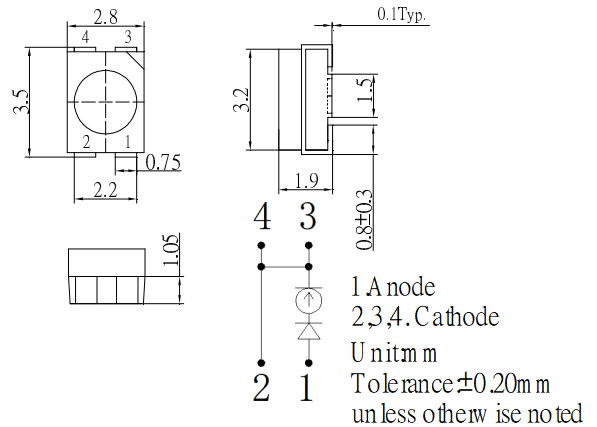
- CRLED is LED which supplies constant current to keep LED Intensity Consistency even when power supply voltage fluctuations or load impedance fluctuations occur.

- CRLED is used with current stabilization and current limiting

■ Features

- High Luminous PLCC4 Power Top SMD LEDs
- 3.5x2.8x1.9mm Standard Directivity/ MSL LEVEL 6
- Superior Weather-resistance / UV Resistant Silicone

■ Outline Dimension

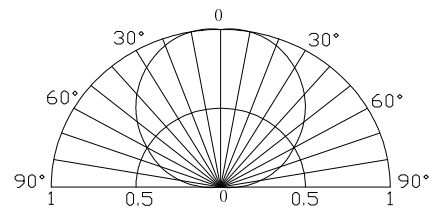


■ Absolute Maximum Rating

($T_a=25^\circ\text{C}$)

Item	Symbol	Value	Unit
DC Forward Voltage	V_F	20	V
Power Dissipation	P_D	320	mW
Operating Temperature	T_{opr}	$-30 \sim +85$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40 \sim +100$	$^\circ\text{C}$
Lead Soldering Temperature	T_{sol}	$260^\circ\text{C}/10\text{sec}$	-

■ Directivity



■ Electrical -Optical Characteristics

($T_a=25^\circ\text{C}$)

Part Number	Color	V_F (V)		I_F (mA)			I_R (μA)	I_v (mcd)*			λ_D (nm)*			2 θ 1/2(deg)
		Min	Max	Min	Typ.	Max.	Max..	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
		$V_F=12\text{V}$		$V_R=8\text{V}$		$V_F=12\text{V}$								
OSW54LS3C1A-CRLED14	Cool White	5.5	20	14	-	10	-	2000	-	-	X=0.27, Y=0.28	120		
OSW44LS3C1A-CRLED14	Pure White	5.5	20	14	-	10	-	2100	-	-	X=0.31, Y=0.34	120		
OSM54LS3C1A-CRLED14	Warm White	5.5	20	14	-	10	-	1600	-	-	X=0.45, Y=0.41	120		
OSB64LS3C1A-CRLED14	Ice Blue	5.5	20	14	-	10	-	2100	-	-	X=0.19, Y=0.29	120		
OSB5SAS3C1A-CRLED14	Blue	5.5	20	14	-	10	-	280	-	465	470	475	120	
OSG5DAS3C1A-CRLED14	Pure Green	5.5	20	14	-	10	-	900	-	520	525	530	120	
OSG8NUS3C1A-CRLED14	Yellow Green	5	20	14	-	10	-	45	-	565	570	575	120	
OSY5JAS3C1A-CRLED14	Yellow	5	20	14	-	10	-	100	-	585	590	595	120	
OSY5MAS3C1A-CRLED14	Yellow	5	20	14	-	10	-	400	-	585	590	595	120	
OSO5JAS3C1A-CRLED14	Orange	5	20	14	-	10	-	100	-	600	605	610	120	
OSR5JAS3C1A-CRLED14	Red	5	20	14	-	10	-	100	-	620	625	630	120	
OSR5MAS3C1A-CRLED14	Red	5	20	14	-	10	-	400	-	620	625	630	120	

*1 Tolerance of measurements of chromaticity coordinate is $\pm 10\%$

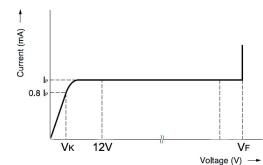
*2 Tolerance of measurements of dominant wavelength is $\pm 1\text{nm}$

*3 Tolerance of measurements of luminous intensity is $\pm 15\%$

*4 Tolerance of measurements of forward voltage is $\pm 0.1\text{V}$

■ Applications

- Electronic Signs And Signals/ Small Area Illuminations
- Back Lighting/ Toys/ Other Lighting

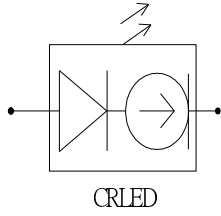


Explanation of terms
 I_p Pinch-off current at 12v
 V_k Voltage which produces 0.8p or greater current
 V_F Breakdown voltage

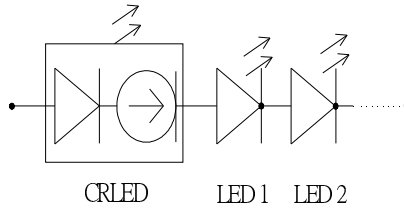
Current Regulative LED
3.5x2.8x1.9mm Power Top SMD LED
OSXXXXXS3C1A-CRLED14

■ **Typical Applications**

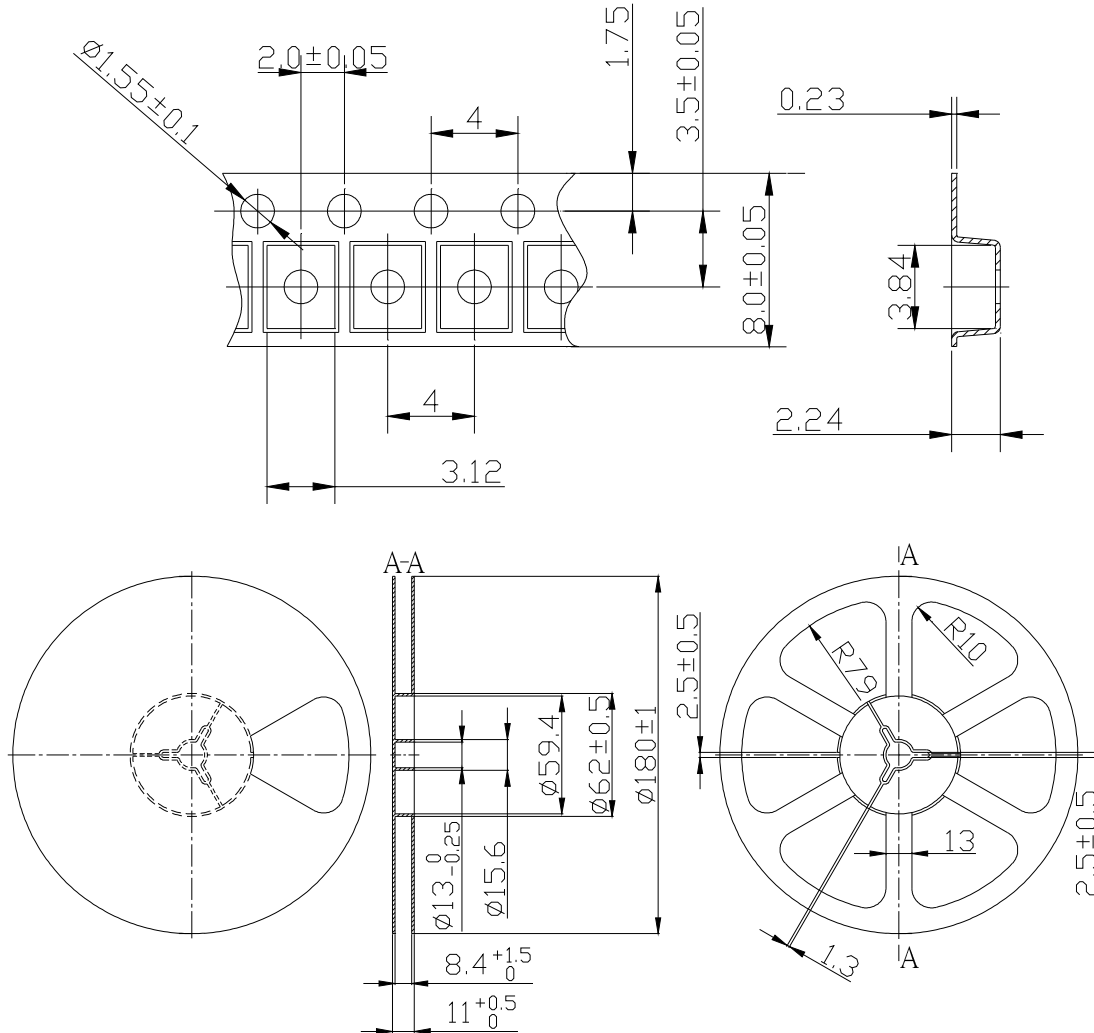
1: Single LED



2: Multi- LEDs in series



PACKING DIMENTIONS



Notes:

1. Unit: mm
2. 2000pcs/Reel

Current Regulative LED
3.5x2.8x1.9mm Power Top SMD LED
OSXXXXS3C1A-CRLED14

Precautions in Use for Surface Mount Diode

■ Storage

· Storage Conditions

Before opening the package:

The LEDs should be kept at 30°C or less and 60%RH or less. The LEDs should be used within a year. When storing the LEDs, moisture proof packaging with absorbent material (silica gel) is recommended.

· After opening the package:

Soldering should be done right after opening the package (within 24hrs).

Keeping of a fraction, sealing and Temperature: 5~30°C Humidity: Less than 30%.

If the package has been opened more than 24 Hours, components should be dried for 12hrs, at 60±5°C.

· Optosupply LED electrode sections are comprised of a silver plated copper alloy. The silver surface may be affected by environments which contain corrosive gases and so on. Please avoid conditions which may cause the LED to corrode, tarnish or discolor. This corrosion or discoloration may cause difficulty during soldering operations. It is recommended that the User use the LEDs as soon as possible.

· Please avoid rapid transitions in ambient temperature, especially in high humidity environments where condensation can occur.