

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
- Superior Weather-resistance / UV Resistant Silicone
- MSL LEVEL 6

■ Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V _F	20	V
Power Dissipation	P _D	350	mW
Operating Temperature	T _{opr}	-30 ~ +85	°C
Storage Temperature	T _{stg}	-40~ +100	°C
Lead Soldering Temperature	T _{sol}	260°C/10sec	-

■ Electrical -Optical Characteristics

(Ta=25°C)

Part Number	Color	V _F (V)		I _F (mA)			I _R (μA)	I _v (mcd)*			λD(nm)*			2θ1/2(deg)
		Min	Ma	Min	Typ.	Max.	Max..	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
		x.		V _F = 12V			V _R = 8V	V _F = 12V						
OSW54LS3C1A-CRLED18	Cool White	5.5	20	18	-	10	-	2000	-	X=0.27, Y=0.28				120
OSW44LS3C1A-CRLED18	Nature White	5.5	20	18	-	10	-	2100	-	X=0.31, Y=0.34				120
OSM54LS3C1A-CRLED18	Warm White	5.5	20	18	-	10	-	1600	-	X=0.45, Y=0.41				120
OSB64LS3C1A-CRLED18	Ice Blue	5.5	20	18	-	10	-	2100	-	X=0.19, Y=0.29				120
OSB5SAS3C1A-CRLED18	Blue	5.5	20	18	-	10	-	280	-	465	470	475	120	
OSG5DAS3C1A-CRLED18	Pure Green	5.5	20	18	-	10	-	900	-	520	525	530	120	
OSY5MAS3C1A-CRLED18	Yellow	5	20	18	-	10	-	400	-	585	590	595	120	
OSR5MAS3C1A-CRLED18	Red	5	20	18	-	10	-	400	-	620	625	630	120	

*1 Tolerance of measurements of chromaticity coordinate is ±10%

*2 Tolerance of measurements of dominant wavelength is ±1nm

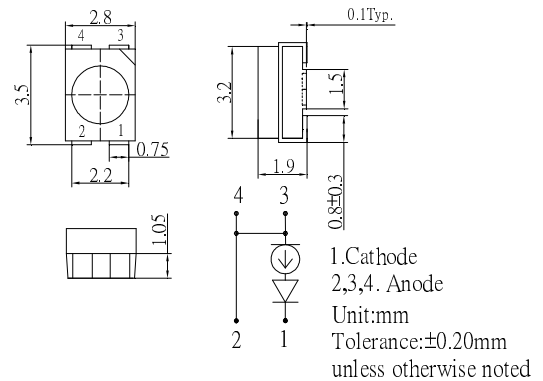
*3 Tolerance of measurements of luminous intensity is ±15%

*4 Tolerance of measurements of forward voltage is ±0.1V

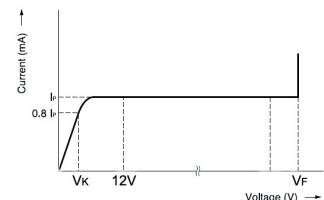
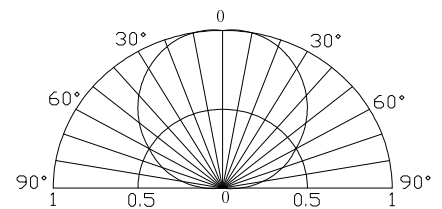
■ Applications

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

■ Outline Dimension

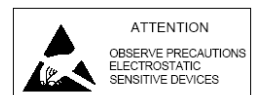


■ Directivity



Explanation of terms
I_F Pinch-off current at 12V
V_K Voltage which produces 0.8I_F or greater current
V_F Breakdown voltage

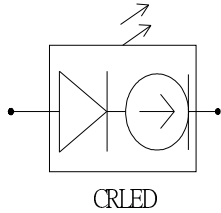
LED & Application Technologies



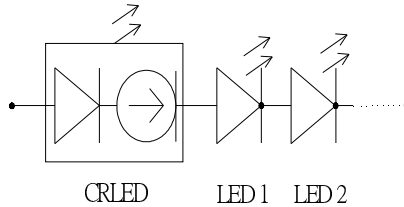
Current Regulative LED
3.5x2.8x1.9mm Power Top SMD LED
OSXXXXS3C1A-CRLED18
VER A.1.2

■ **Typical Applications**

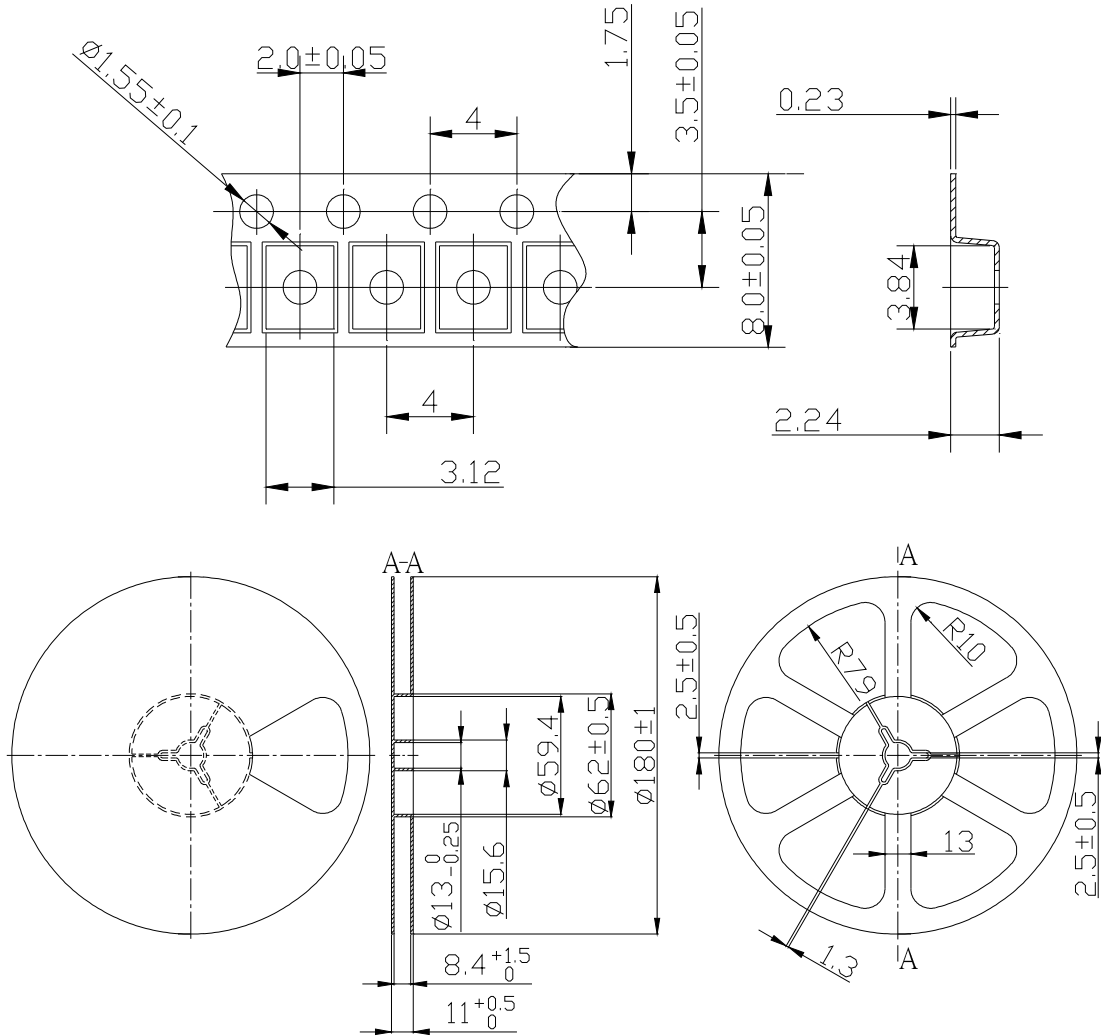
1 : Single LED



2 : Multi- LEDs in series



PACKING DIMINTIONS



Notes:

1. Unit: mm
2. 2000pcs/Reel

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.