

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

■ 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	Topr	-30 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Lead Soldering Temperature	Tsol	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

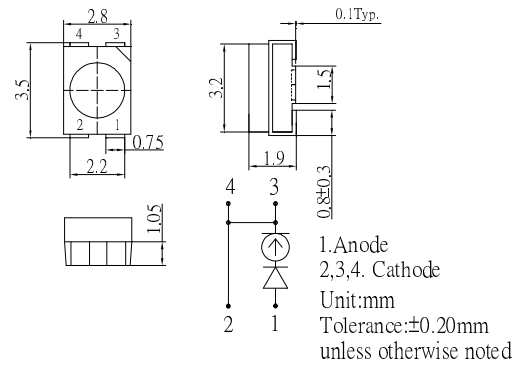
*3 Tolerance of measurements of luminous intensity is ±15%

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

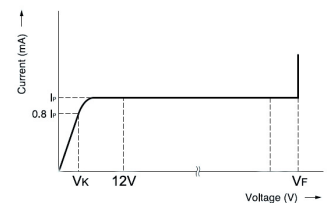
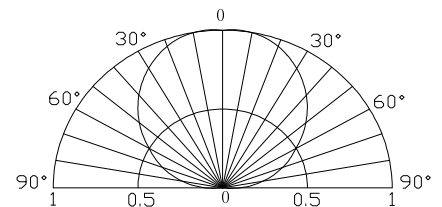
■ Applications

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

■ Outline Dimension

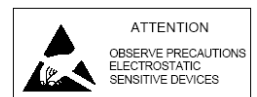


■ Directivity



Explanation of terms
I_c: Pinch-off current at 12V
V_k: Voltage which produces 0.8Ip or greater current
V_F: Breakdown voltage

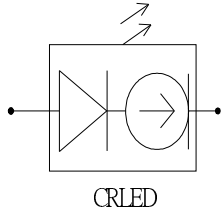
LED & Application Technologies



Current Regulative LED
3.5x2.8x1.9mm Power Top SMD LED
OSXXXXXS3C1A-CRLED18
VER A.1

■ **Typical Applications**

1: Single LED



2: Multi- LEDs in series

