

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 LEDs / 5mm Round Standard Directivity
- Superior Weather-resistance / UV Resistant Epoxy
- Water Clear Type

■ 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/5sec	-

■ 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						
OSW5DK5A31A-CRLED18	White	5.5	20		18	-	10	-	12000	-	X=0.27, Y=0.28		30	
OSM5DK5A31A-CRLED18	Warm White	5.5	20		18	-	10	-	8000	-	X=0.45, Y=0.41		30	
OSK5DK5A31A-CRLED18	Pink	5.5	20		18	-	10	-	2500		X=0.45, Y=0.17		30	
OSB64L5A31A-CRLED18	Ice Blue	5.5	20		18	-	10	-	10000		X=0.19, Y=0.29		30	
OSB5SA5A31A-CRLED18	Blue	5.5	20		18	-	10	-	6500	-	465 470 475		30	
OSG5DA5A31A-CRLED18	Pure Green	5.5	20		18	-	10	-	12000	-	520 525 530		30	
OSG8NU5A31A-CRLED18	Yellow Green	5	20		18	-	10	-	750	-	565 570 575		30	
OSY5JA5A31A-CRLED18	Yellow	5	20		18	-	10	-	1800	-	585 590 595		30	
OSY5MA5A31A-CRLED18	Yellow	5	20		18	-	10	-	7500	-	585 590 595		30	
OSO5JA5A31A-CRLED18	Orange	5	20		18	-	10	-	1800	-	600 605 610		30	
OSR5JA5A31A-CRLED18	Red	5	20		18	-	10	-	1800	-	620 625 630		30	
OSR5MA5A31A-CRLED18	Red	5	20		18	-	10	-	7500	-	620 625 630		30	

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

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

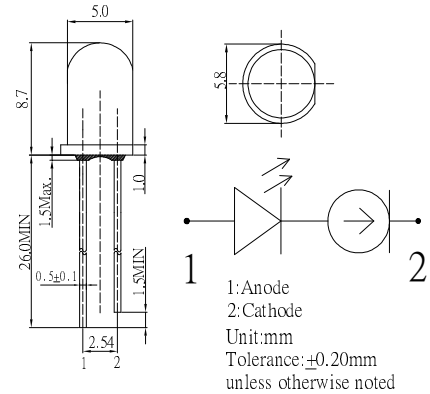
*3 Tolerance of measurements of luminous intensity is ±15%

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

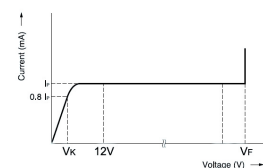
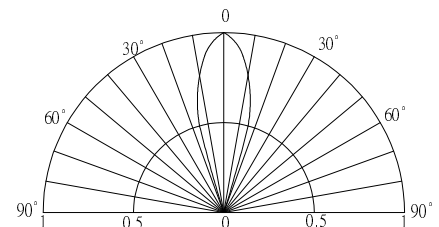
■ Applications

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

■ Outline Dimension



■ Directivity

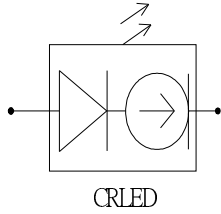


Explanation of terms
I_F Pinch-off current at 12v
V_F Voltage which produces 0.8Is or greater current
V_R Breakdown voltage

Current Regulative LED
5mm Round LED
OSXXXX5A31A-CRLED18
VER A.1

■ **Typical Applications**

1: Single LED



2: Multi- LEDs in series

