

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

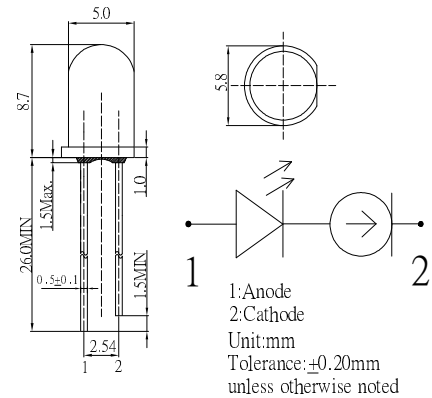
- High Luminous LEDs / 5mm Round Standard Directivity
- Superior Weather-resistance / UV Resistant Epoxy
- Water Clear Type

■ Absolute Maximum Rating

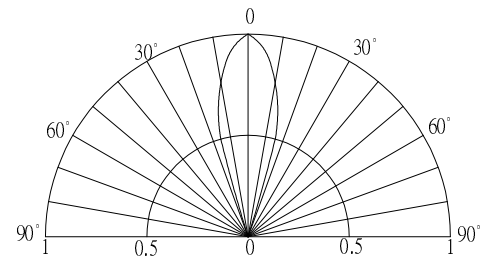
(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V _F	20	V
Reverse Voltage	V _R	8	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	-

■ Outline Dimension



■ Directivity



■ 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.	Max.	Min	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
		V _F =12V		V _R =8V		V _F =12V								
OSW5DK5A31A-CRLED16	White	5.5	20	16	-	10	-	10000	-	X=0.27, Y=0.28				30
OSM5DK5A31A-CRLED16	Warm White	5.5	20	16	-	10	-	7000	-	X=0.45, Y=0.41				30
OSK5DK5A31A-CRLED16	Pink	5.5	20	16	-	10	-	2180	-	X=0.45, Y=0.17				30
OSB64L5A31A-CRLED16	Ice Blue	5.5	20	16	-	10	-	8400	-	X=0.19, Y=0.29				30
OSB5SA5A31A-CRLED16	Blue	5.5	20	16	-	10	-	5800	-	465 470 475				30
OSG5DA5A31A-CRLED16	Pure Green	5.5	20	16	-	10	-	10000	-	520 525 530				30
OSY5PA5A31A-CRLED16	Yellow	5	20	16	-	10	-	7000	-	585 590 595				30
OSO5PA5A31A-CRLED16	Orange	5	20	16	-	10	-	7000	-	600 605 610				30
OSR5PA5A31A-CRLED16	Red	5	20	16	-	10	-	7000	-	620 625 630				30

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

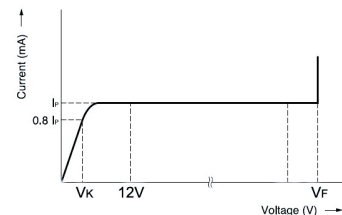
*2 Tolerance of measurements of dominant wavelength is ±1nm

*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

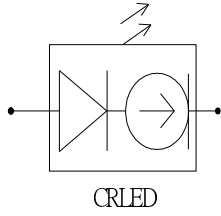


Explanation of terms
I_F Pinch-off current at 12v
V_k Voltage which produces 0.8I_F or greater current
V_F Breakdown voltage

Current Regulative LED
5mm Round LED
OSXXXX5A31A-CRLED16

■ **Typical Applications**

1: Single LED



2: Multi- LEDs in series

