

CURRENT REGULATIVE LED

■Outline Dimension

CRLED

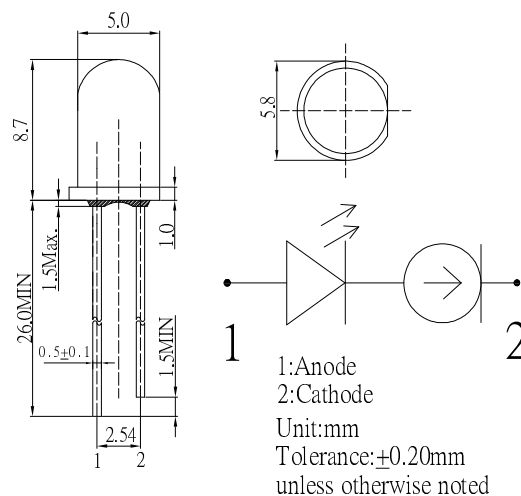
- CRLED is LED which supplies constant current to keep LED Intensity Consistency even when power supply voltage fluctuations or load impedance fluctuations occur.
- CRLED is used with current stabilization and current limiting

■Features

- 5mm Round Standard Directivity
- UV Resistant Epoxy
- Water Clear Type

■Applications

- Counterfeit Detection/ Fluid Leak Detection
- NDT Crack Detection/ Forensic Science/Infection Control

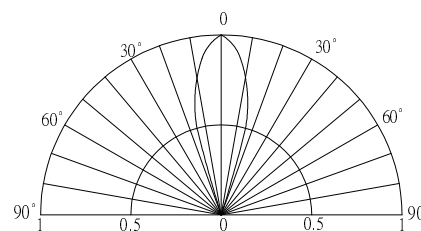


■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Voltage	V _F	20	V
Power Dissipation	P _D	320	mW
Operating Temperature	T _{opr}	-30 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T _{sol}	260°C/5sec	-

■Directivity



■Electrical -Optical Characteristics

(Ta=25°C)

Part Number	Visual Color	V _F (V)*		I _F (mA)			I _R (μA)	Radiant flux*(mW)			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			V _F = 12V			
OSV1YL5A31A-CRLED14	White	5	20	-	14	-	10	1.5	3	-	360	365	370	30
OSV2YL5A31A-CRLED14	White	5	20	-	14	-	10	2.5	5	-	370	375	380	30
OSV3SL5A31A-CRLED14	Purple	5	20	-	14	-	10	5	7	-	380	385	390	30
OSV4DL5A31A-CRLED14	Purple	5	20	-	14	-	10	7	10	-	390	395	400	30
OSV5DL5A31A-CRLED14	Purple	5	20	-	14	-	10	7	10	-	400	405	410	30

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

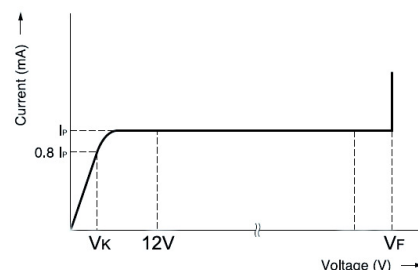
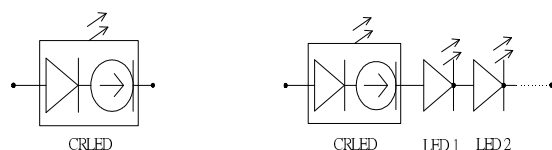
*2 Tolerance of measurements of radiant flux is $\pm 15\%$

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

■Typical Applications

1: Single LED

2: Multi- LEDs in series



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