

LED

High Power LEDs

Feature

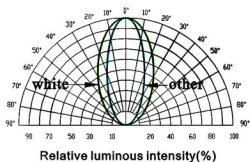
- 10Φ Round Package
- Water Clear
- Viewing Angle
(2θ 1/2: White 60°, Other 40°)

Applications

RED YELLOW GREEN BLUE WHITE

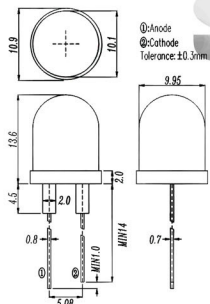
architectural and decorating lighting
portable flashlight, miner's lamp.

Radiation Diagram



Outline Dimensions

(Unit:mm)



Absolute Maximum Ratings

Parameter	Symbol	Value		Unit
		1R27E/YXXC-1A1	1R27G/B/WXXC-1A1	
Forward Current	IF	100	100	mA
Peak Forward Current	IFP	150	120	mA
Reverse Voltage	VR	5		V
Operating Temperature	Topr	-30 to +85		°C
Storage Temperature	Tstg	-30 to +65		°C
Soldering Temperature	Tslid	260±5		°C

Note: *1:IFP Conditions -- Pulse Width ≦ 1msec and Duty ≦ 1/10.
*2:Soldering time ≦ 5 seconds.

Characteristics

(Ta = 25°C)

1R27EXXC-1A1	Color	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	Red	VF	IF=80mA	-	2.1	2.6	V
Reverse Current		IR	VR=5V	-	-	50	μA
Luminous Intensity		Iv	IF=80mA	2000	-	50000	mcd
Dominant Wavelength		λd	IF=80mA	610	-	640	nm
Half Bandwidth		Δλ	IF=80mA	-	16	-	nm

1R27YXXC-1A1	Color	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	Yellow	VF	IF=80mA	-	2.1	2.6	V
Reverse Current		IR	VR=5V	-	-	50	μA
Luminous Intensity		Iv	IF=80mA	2000	-	50000	mcd
Dominant Wavelength		λd	IF=80mA	580	-	597	nm
Half Bandwidth		Δλ	IF=80mA	-	16	-	nm

1R27GXXC-1A1	Color	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	Green	VF	IF=80mA	-	3.2	4.2	V
Reverse Current		IR	VR=5V	-	-	50	μA
Luminous Intensity		Iv	IF=80mA	3000	-	70000	mcd
Dominant Wavelength		λd	IF=80mA	500	-	535	nm
Half Bandwidth		Δλ	IF=80mA	-	35	-	nm

1R27BXXC-1A1	Color	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	Blue	VF	IF=80mA	-	3.2	4.2	V
Reverse Current		IR	VR=5V	-	-	50	μA
Luminous Intensity		Iv	IF=80mA	2000	-	50000	mcd
Dominant Wavelength		λd	IF=80mA	450	-	480	nm
Half Bandwidth		Δλ	IF=80mA	-	30	-	nm

1R27WXXC-1A1	Color	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	White	VF	IF=80mA	-	3.2	4.2	V
Reverse Current		IR	VR=5V	-	-	50	μA
Luminous Intensity		Iv	IF=80mA	3000	-	70000	mcd
Chromaticity Coordinates		X	IF=80mA	0.24	-	0.36	
	Y	IF=80mA	0.25	-	0.37		