

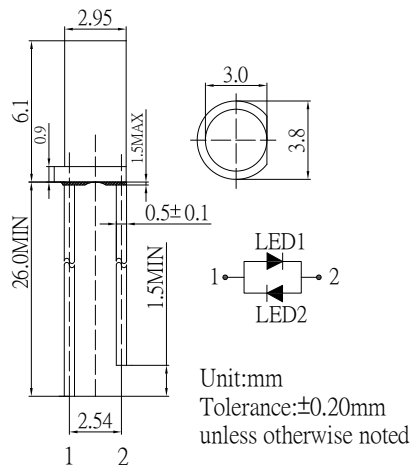
■Features

- High Luminous LEDs
- 3mm Flat Top Standard Directivity
- Long Lifetime Operation
- UV Resistant Epoxy
- Water Clear Type
- Bi-polar Type

■Applications

- Toys
- Audio
- Games
- Other Lighting

■Outline Dimension

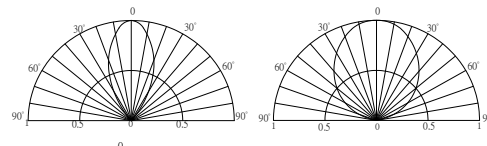


■Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value		Unit
		W/M/B/PG	Y/O/R	
DC Forward Current	I _F	30	30	mA
Pulse Forward Current#	I _{FP}	100	100	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	102	78	mW
Operating Temperature	T _{opr}	-30 ~ +85		°C
Storage Temperature	T _{stg}	-40 ~ +100		°C
Lead Soldering Temperature	T _{sol}	260°C/5sec		-

#Pulse width Max.10ms Duty ratio max 1/10

■Directivity



■Electrical -Optical Characteristics (Ta=25°C)

Part Number	Color			V _F (V)*			I _v (mcd)*			λ _D (nm)/CCT(K)*			θ1/2(deg)
				Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
				I _F =20mA			I _F =20mA			I _F =20mA			
OSWWD23NA1A	Cool White	W		2.7	2.9	3.4	1120	1560	-	CCT: 8500-18000K			100
OSMMD23NA1A	Warm White	M		2.7	2.9	3.4	1120	1560	-	CCT:2700-3300K			100
OSBBS23N51A	Blue	B		2.7	2.9	3.4	500	750	-	465	465	475	50
OSPPD23N51A	Pure Green	PG		2.7	2.9	3.4	2180	3000	-	520	525	530	50
OSYYP23N51A	Yellow	Y		1.8	2.1	2.6	750	1120	-	585	590	595	50
OSOOP23N51A	Orange	O		1.8	2.1	2.6	750	1120	-	600	605	610	50
OSRRP23N51A	Red	R		1.8	2.1	2.6	750	1120	-	620	625	630	50

*1 Tolerance of measurements of domi. wavelength is ±1nm

*2 Tolerance of measurements of chromaticity coordinates/CCT is ±10%

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

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