

■Features

- Single chip
- Super high brightness of reverse mount LED
- Compact package outline
(L x W x T) of 3.2mm x 1.6mm x 0.8mm
- Compatible to IR reflow soldering.
- Water Clear Type Except White&Warm White

■Applications

- Backlighting (switches, keys, etc.)
- Marker lights (e.g. steps, exit ways, etc.)

■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value		Unit
		W5/M5/B5/G5	G8/Y5//O5/R5	
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	108	78	mW
Operating Temperature	Topr	-40 ~ +85		°C
Storage Temperature	Tstg	-40~ +85		°C
Lead Soldering Temperature	Tsol	260°C/10sec		-

*Pulse width Max 0.1ms, Duty ratio max 1/10

■Electrical -Optical Characteristics

(Ta=25°C)

Part Number	Color		V _F (V)			I _R (μA)	I _v (mcd)			λD(nm)			2θ1/2(deg)
			Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
			I _F =20mA			V _R =5V		I _F =20mA					
OSW51206E1N-0.8T	White	W5	2.8	3.1	3.6	10	500	700	-	8000-18000K			140
OSM51206E1N-0.8T	Warm White	M5	2.8	3.1	3.6	10	500	700	-	2700-3300K			140
OSB51206E1N-0.8T	Blue	B5	2.8	3.1	3.6	10	100	150	-	460	465	475	140
OSG51206E1N-0.8T	True Green	G5	2.8	3.1	3.6	10	500	700	-	515	525	530	140
OSG81206E1N-0.8T	Yellow Green	G8	1.8	2.1	2.6	10	20	35	-	565	570	575	140
OSY51206E1N-0.8T	Yellow	Y5	1.8	2.1	2.6	10	80	100	-	585	590	595	140
OSO51206E1N-0.8T	Orange	O5	1.8	2.1	2.6	10	80	100	-	600	605	610	140
OSR51206E1N-0.8T	Red	R5	1.8	2.1	2.6	10	80	100	-	615	625	630	140

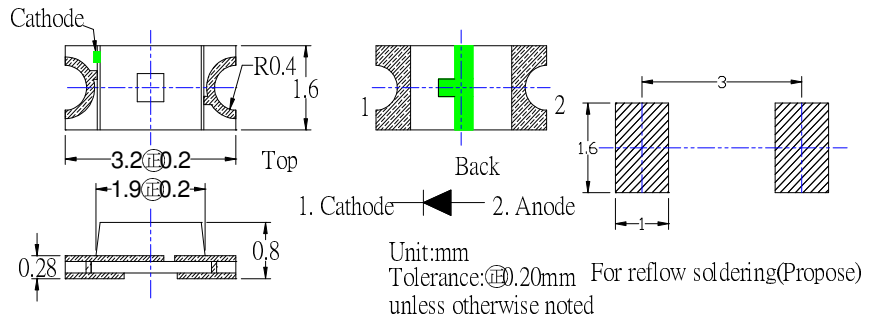
*1 Tolerance of measurements of chromaticity coordinate is ±10%

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

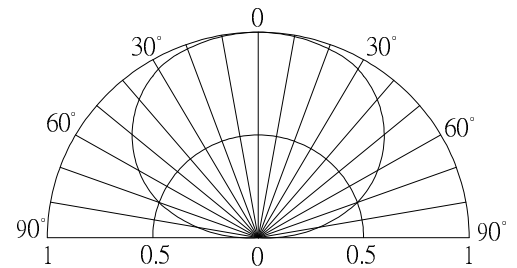
*3 Tolerance of measurements of luminous intensity is ±15%

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

■Outline Dimension



■Directivity



■ **Cautions:**

1. After open the package, the LED's floor life is 1 year under 30°C or less and 60%RH or less (MSL:2).
2. Heat generation must be taken into design consideration when using the LED.
3. Power must be applied resistors for protection, over current would be caused the optic damage to the devices and wavelength shift.
4. Manual tip solder may cause the damage to Chip devices, so advised that heat of iron should be lower than 15W with temperature control under 5 seconds at 230-260 deg. C.
(The device would be got damage in re working process, recommended under 5 seconds at 230-260 deg. C)
5. All equipment and machinery must be properly grounded. It is recommended to use a wristband or anti-electrostatic glove when handing the LED.
6. Use IPA as a solvent for cleaning the LED. The other solvent may dissolve the LED package and the epoxy, Ultrasonic cleaning should not be done.
7. Damaged LED will show unusual characteristics such as leak current remarkably increase, turn-on voltage becomes lower and the LED get unlight at low current.
8. OPTOSUPPLY will not do 4M change without advance consultation.