

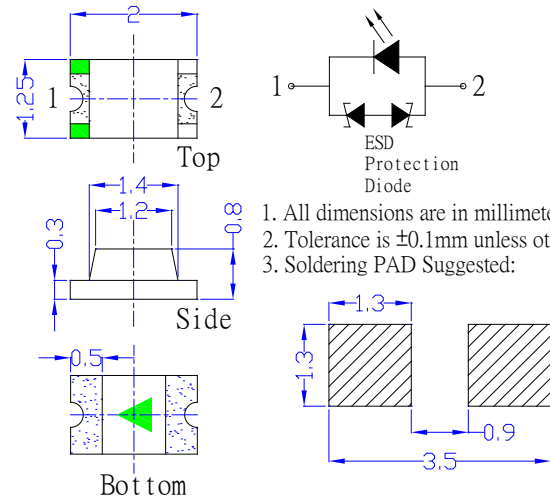
■Features

- Single chip
- 2.0x1.25x0.8mm(0805) standard package.
- Suitable for all SMT assembly methods.
- Compatible with infrared and vapor phase reflow solder process.
- This product doesn't contain restriction Substance, comply with ROHS standard.
- Compatible with automatic placement equipment.
- Superior ESD protection
- Value of Electrostatic Discharge Threshold (HBM):8000V
- Water clear type

■Applications

- Automotive : Dashboards, stop lamps, turn signals.
- Backlighting : LCDs, key pads, advertising.

■Outline Dimension



1. All dimensions are in millimeters;
2. Tolerance is ± 0.1 mm unless otherwise noted;
3. Soldering PAD Suggested:

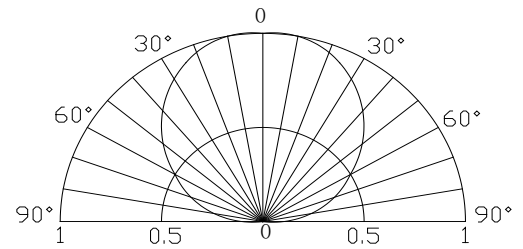
■Absolute Maximum Rating

($T_a=25^\circ\text{C}$)

Item	Symbol	Value		Unit
		W5/B5/G5	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	T_{opr}	-40 ~ +85		$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +85		$^\circ\text{C}$
Lead Soldering Temperature	T_{sol}	260 $^\circ\text{C}$ /10sec		-

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

■Directivity



■Electrical -Optical Characteristics

($T_a=25^\circ\text{C}$)

Part Number	Color		V_F (V)*			I_R (μA)	I_v (mcd)*			λ_D (nm)/CCT(K)*			2 θ /2(deg)
			Min.	Typ.	Max.		Min.	Typ.	Max.	Min.	Typ.	Max.	
			$I_F=20\text{mA}$				$V_R=5\text{V}$	$I_F=20\text{mA}$					
OSW50805C1F-Z	White	W5	2.8	3.1	3.6	100	300	400	-	7000-10000K			120
OSB50805C1F-Z	Blue	B5	2.8	3.1	3.6	100	80	120	-	460	465	470	120
OSG50805C1F-Z	True Green	G5	2.8	3.3	3.6	100	400	500	-	510	515	520	120
OSY50805C1F-Z	Yellow	Y5	1.8	2.1	2.6	100	100	120	-	585	590	595	120
OSO50805C1F-Z	Orange	O5	1.8	2.1	2.6	100	80	100	-	600	605	610	120
OSR50805C1F-Z	Red	R5	1.8	2.1	2.6	100	100	120	-	620	625	630	120

*1 Tolerance of measurements of chromaticity coordinate is $\pm 10\%$

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

*3 Tolerance of measurements of luminous intensity is $\pm 15\%$

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

■ **Optical and Electrical Characteristics**

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

