

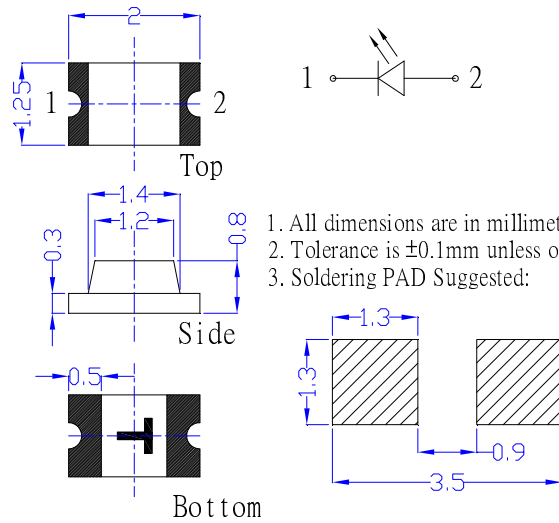
■Features

- 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 ROHS standard.
- Compatible with automatic placement equipment.

■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;

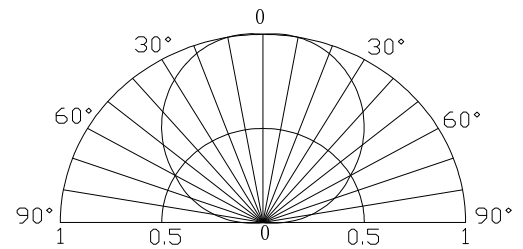
■Absolute Maximum Rating

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

Item	Symbo l	Value		Unit
		WT/MT /BL/K	HR/YG /YL	
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 $^\circ\text{C}$ /5sec		-

*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)			λD (nm)			$2\theta_{1/2}$ (deg)
			Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
			$I_F=20\text{mA}$			$V_R=5\text{V}$	$I_F=20\text{mA}$						
OSW50805C1E	White	W5	-	3.3	3.6	10	350	450	-	X:0.29, Y:0.29			120
OSW40805C1E	White	W4	-	3.3	3.6	10	350	450	-	X:0.31, Y:0.33			120
OSM50805C1E	Warm White	M5	-	3.3	3.6	10	350	450	-	X:0.44, Y:0.41			120
OSK50805C1E	Pink	K5	-	3.3	3.6	10	60	90	-	X:0.38, Y:0.18			120
OSB50805C1E	Blue	B5	-	3.2	3.6	10	42	80	-	460	465	475	120
OSG50805C1E	True Green	G5	-	3.3	3.6	10	400	450	-	520	525	530	120
OSG80805C1E	Yellow Green	G8	-	2.0	2.6	10	20	35	-	564	570	578	120
OSY50805C1E	Yellow	Y5	-	2.1	2.6	10	100	120	-	585	590	595	120
OSO50805C1E	Orange	O5	-	2.0	2.6	10	100	120	-	600	605	610	120
OSR50805C1E	Red	R5	-	2.0	2.6	10	120	150	-	620	625	630	120

Note: * V_f tolerance: $\pm 0.05\text{V}$ * Dominant wavelength tolerance: $\pm 1\text{nm}$ * Luminous intensity tolerance: $\pm 10\%$

■ **Optical and electrical characteristics**

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

