

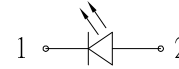
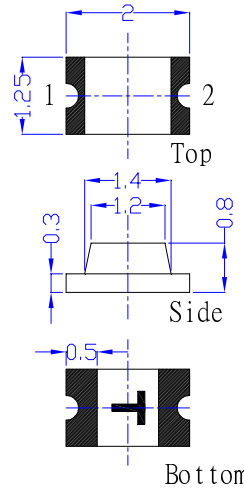
### ■Features

- 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.

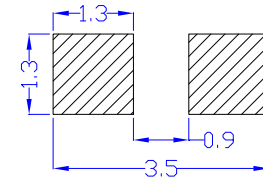
### ■Applications

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

### ■Outline Dimension



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



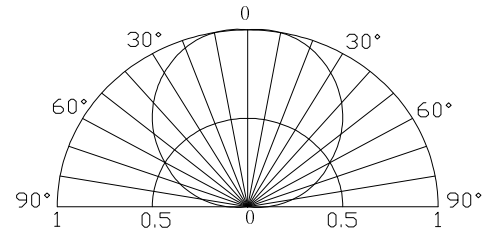
### ■Absolute Maximum Rating

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

Item	Symbol	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

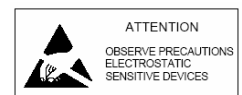


### ■Electrical -Optical Characteristics

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

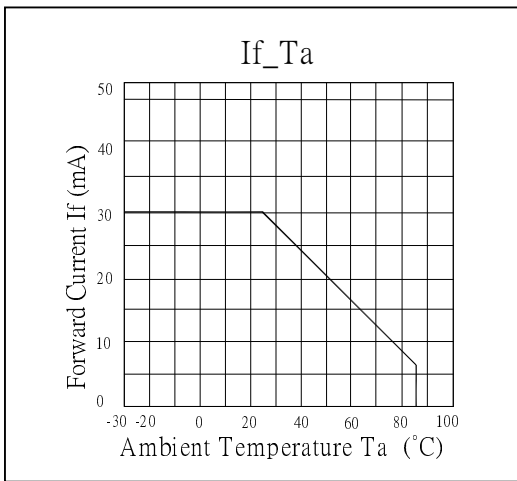
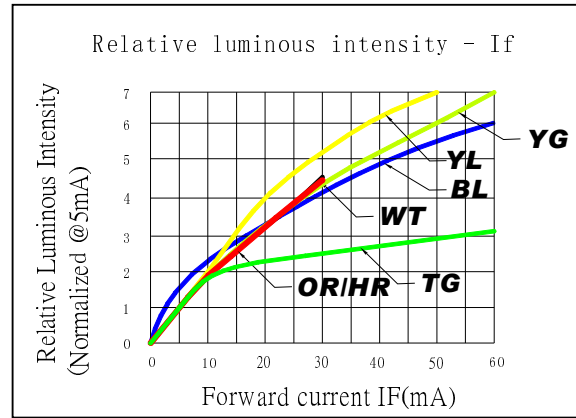
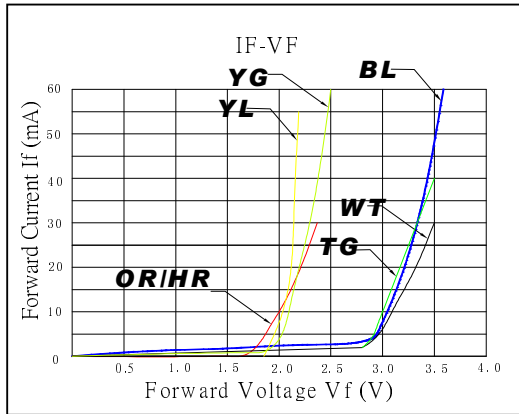
Part Number	Color		$V_F$ (V)			$I_R$ ( $\mu\text{A}$ )	$I_v$ (mcd)			$\lambda_D$ (nm)			201/2(deg)
			Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
			$I_F=20\text{mA}$			$V_R=5\text{V}$	$I_F=20\text{mA}$						
OSW50805C1E	White	W5	-	3.3	3.6	100	350	450	-	X:0.29, Y:0.29			120
OSM50805C1E	Warm White	M5	-	3.3	3.6	100	350	450	-	X:0.44, Y:0.41			120
OSK50805C1E	Pink	K5	-	3.3	3.6	100	60	90	-	X:0.38, Y:0.18			120
OSB50805C1E	Blue	B5	-	3.2	3.6	100	42	80	-	460	465	475	120
OSG50805C1E	True green	G5	-	3.3	3.6	100	400	450	-	520	525	530	120
OSG80805C1E	Yellow green	G8	-	2.0	2.6	100	20	35	-	564	570	578	120
OSY50805C1E	Yellow	Y5	-	2.1	2.6	100	100	120	-	585	590	595	120
OSO50805C1E	Orange	O5	-	2.0	2.6	100	100	120	-	600	605	610	120
OSR50805C1E	Red	R5	-	2.0	2.6	100	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



**WT**

