

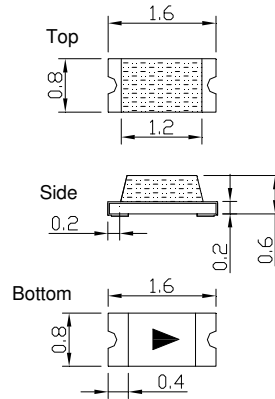
**■Features**

- Single chip
- Super high brightness of surface mount LED
- Sorting for  $I_v$  and  $V_f$  @ 5mA of  $I_f$
- Compact package outline  
(LxWxT) of 1.6mm x 0.8mm x 0.6mm
- Compatible to IR reflow soldering.

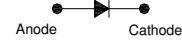
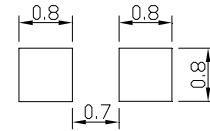
**■Applications**

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

**■Outline Dimension**



Recommended Solder Pad



Notes: 1. All dimensions are in millimeters ;  
2. Tolerance is  $\pm 0.10$  mm unless otherwise noted.

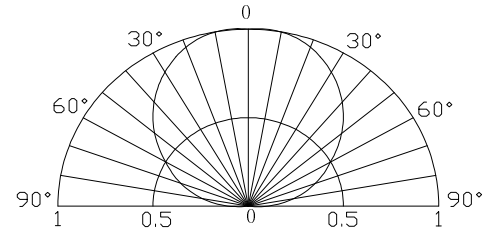
**■Absolute Maximum Rating**

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

Item	Symbol	Value		Unit
		WT/BL/TG/YG	YL/OR/HR	
DC Forward Current	$I_F$	20	20	mA
Pulse Forward Current*	$I_{FP}$	100	100	mA
Reverse Voltage	$V_R$	5	5	V
Power Dissipation	$P_D$	68	48	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)			2 $\theta_{1/2}$ (deg)
			Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
			$I_F=5\text{mA}$			$V_R=5\text{V}$	$I_F=5\text{mA}$						
OSM50603C1E	Warm white	M5	2.5	2.8	3.4	100	60	-	160	X=0.44, Y=0.41			120
OSW50603C1E	White	W5	2.5	2.8	3.4	100	100	-	200	X=0.27, Y=0.28			120
OSK40603C1E	Pink	K4	2.5	2.8	3.4	100	50	-	100	X=0.31, Y=0.20			120
OSVX0603C1E	Violet	VX	2.5	2.8	3.4	100	70	-	130	X=0.20, Y=0.09			120
OSB50603C1E	Blue	B5	2.5	2.8	3.4	100	14	-	40	455	470	475	120
OSG50603C1E	True Green	G5	2.5	2.8	3.4	100	120	-	220	520	525	530	120
OSG80603C1E	Yellow green	G8	1.6	1.8	2.4	100	5	-	15	565	570	575	120
OSY50603C1E	Yellow	Y5	1.6	1.8	2.4	100	15	-	50	585	590	595	120
OSO50603C1E	Orange	O5	1.6	1.8	2.4	100	15	-	50	600	605	610	120
OSR50603C1E	Red	R5	1.6	1.8	2.4	100	15	-	50	617	625	630	120

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