

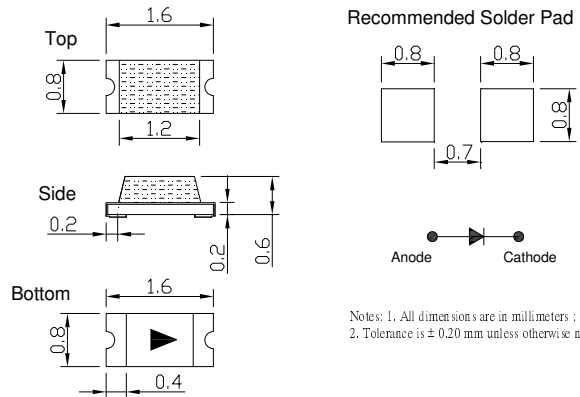
■Features

- 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

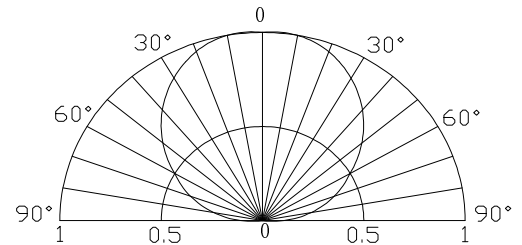


■Absolute Maximum Rating

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

Item	Symbo	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		-

■Directivity



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

■Electrical -Optical Characteristics

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

Part Number	Color		V_F (V)			I_R (μA)	I_v (mcd)			λ_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	10	60	-	160	X=0.44, Y=0.41		120	
OSW50603C1E	White	W5	2.5	2.8	3.4	10	100	-	200	X=0.27, Y=0.28		120	
OSK40603C1E	Pink	K4	2.5	2.8	3.4	10	50	-	100	X=0.31, Y=0.20		120	
OSVX0603C1E	Violet	VX	2.5	2.8	3.4	10	70	-	130	X=0.20, Y=0.09		120	
OSB50603C1E	Blue	B5	2.5	2.8	3.4	10	14	-	40	455 470 475		120	
OSB60603C1E	Ice Blue	B6	2.5	2.8	3.4	10	80	-	200	X=0.18 Y=0.26		120	
OSG50603C1E	True Green	G5	2.5	2.8	3.4	10	120	-	220	520 525 530		120	
OSG80603C1E	Yellow Green	G8	1.6	1.8	2.4	10	5	-	15	565 570 575		120	
OSY50603C1E	Yellow	Y5	1.6	1.8	2.4	10	15	-	50	585 590 595		120	
OSO50603C1E	Orange	O5	1.6	1.8	2.4	10	15	-	50	600 605 610		120	
OSR50603C1E	Red	R5	1.6	1.8	2.4	10	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: $\pm 10\%$

■ **Optical and electrical characteristics**

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

