

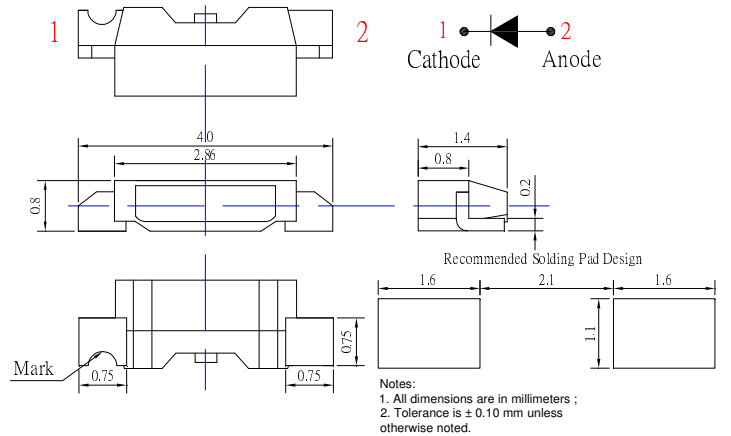
## ■Features

- Single chip
- Suitable for all SMT assembly methods.
- Sorting for  $I_v$  and  $V_f$  @ 20mA of  $I_f$
- Compact package outline  
(LxWxT) of 4.0mm x 0.8mm x 1.4mm
- Compatible to IR reflow soldering.
- MSL:5a

## ■Applications

- Mobile communications equipment (Ipad, Iphone, etc.)
- Digital products (MP3,MP4, etc.)

## ■Outline Dimension



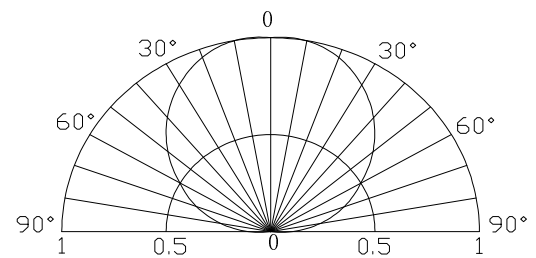
## ■Absolute Maximum Rating

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

Item	Symbol	Value		Unit
		W/M/K/B/PG	Y/R	
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	$P_D$	102	72	mW
Operating Temperature	$T_{opr}$	$-30 \sim +85$		$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$-40 \sim +100$		$^\circ\text{C}$
Lead Soldering Temperature	$T_{sol}$	$260^\circ\text{C}/10\text{sec}$		-

#Pulse width Max.10ms 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)*			CCT(K)\Wd(nm)*			$2\theta_{1/2}$ (deg)
				Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
				$I_F=20\text{mA}$			$V_R=5\text{V}$	$I_F=20\text{mA}$			$I_F=20\text{mA}$			
OSW54008C1F	Cool White	W		2.8	3.0	3.4	10	1400	2000	-	CCT:8000~18000K			120
OSW44008C1F	White	W		2.8	3.0	3.4	10	1400	2000	-	CCT:5500~8500K			120
OSM74008C1F	Natural White	M		2.8	3.0	3.4	10	1400	2000	-	CCT:3500~4500K			120
OSM44008C1F	Warm White	M		2.8	3.0	3.4	10	1400	2000	-	CCT:2300~2700K			120
OSK54008C1F	Pink	K		2.8	3.0	3.4	10	100	200	-	typ.:X=0.26,Y=0.12			120
OSB54008C1F	Blue	B		2.8	3.0	3.4	10	200	400	-	460	465	470	120
OSG54008C1F	Pure Green	PG		2.8	3.0	3.4	10	800	1500	-	515	520	525	120
OSY54008C1F	Yellow	Y		1.8	2.0	2.4	10	200	400	-	585	590	595	120
OSR54008C1F	Red	R		1.8	2.0	2.4	10	200	400	-	620	625	630	120

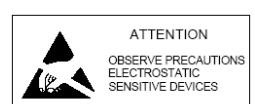
\*1 Tolerance of measurements of chromaticity coordinate is  $\pm 10\%$

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

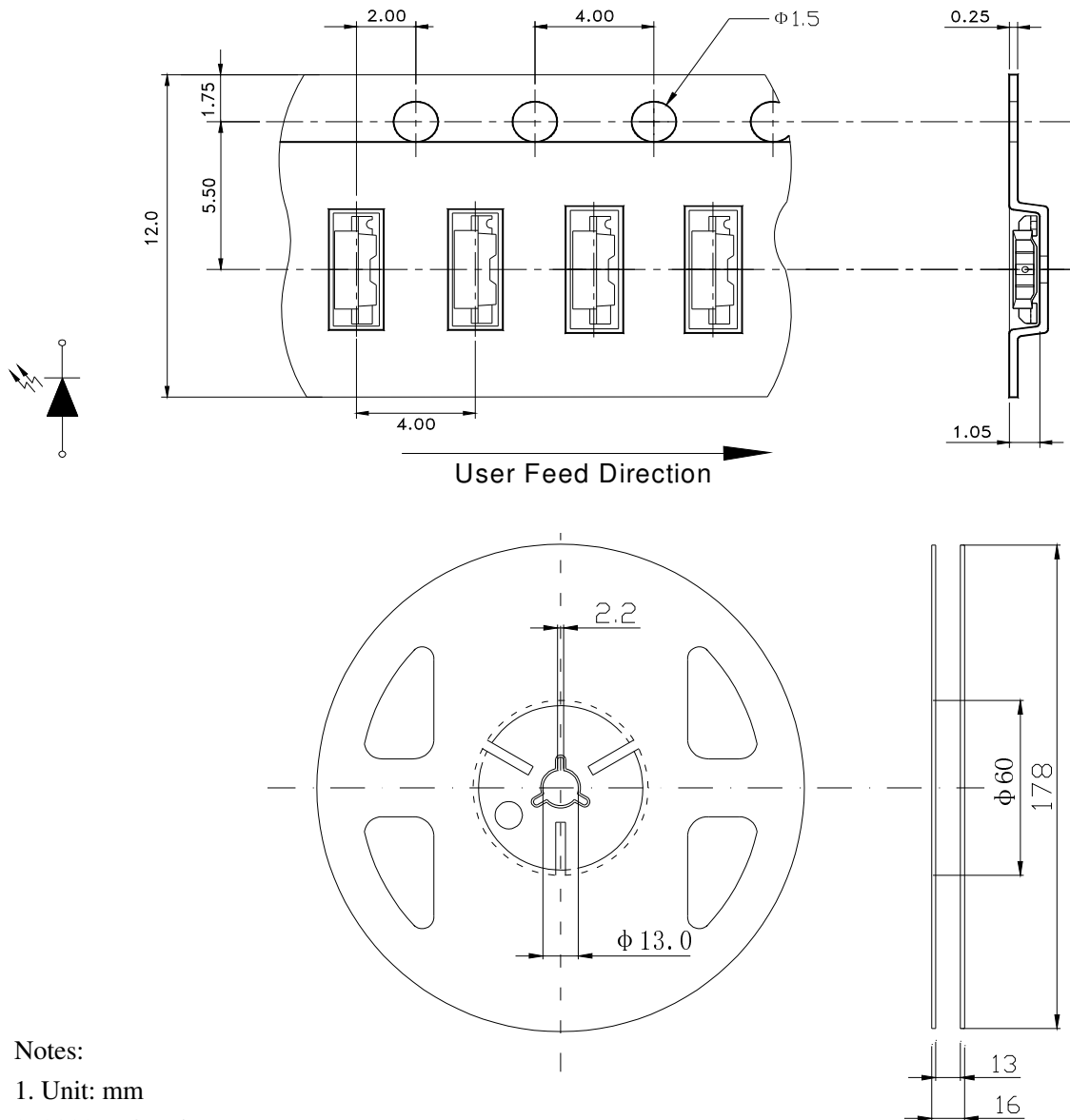
\*3 Tolerance of measurements of luminous intensity is  $\pm 15\%$

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

**LED & Application Technologies**



**PACKING DIMENSIONS**



## Precautions in Use for Surface Mount Diode

### ■ Storage

#### · Storage Conditions

Before opening the package:

The LEDs should be kept at 30°C or less and 60%RH or less. The LEDs should be used within a year. When storing the LEDs, moisture proof packaging with absorbent material (silica gel) is recommended.

#### · After opening the package:

Soldering should be done right after opening the package (within 24hrs).

Keeping of a fraction, sealing and Temperature: 5~30°C Humidity: Less than 30%.

If the package has been opened more than 24 Hours, components should be dried for 12hrs, at  $60 \pm 5^\circ\text{C}$ .

· Optosupply LED electrode sections are comprised of a silver plated copper alloy. The silver surface may be affected by environments which contain corrosive gases and so on. Please avoid conditions which may cause the LED to corrode, tarnish or discolor. This corrosion or discoloration may cause difficulty during soldering operations. It is recommended that the User use the LEDs as soon as possible.

· Please avoid rapid transitions in ambient temperature, especially in high humidity environments where condensation can occur.