

# SPECIFICATION

Product : Ceramic 3535 IR LED

Part No. : IWS-C352L-EI-K1

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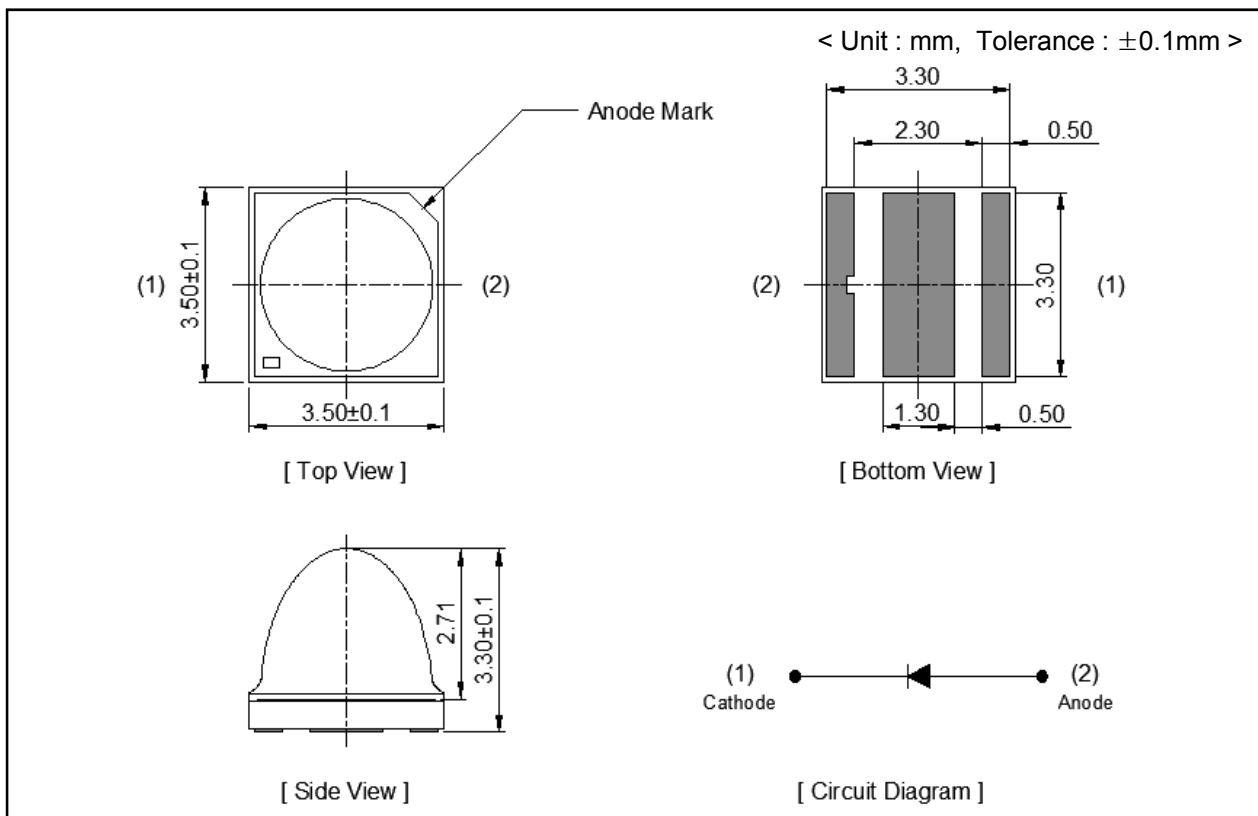
### 1. Features

- IR Light source
- SMD Ceramic Package with Silicone Lens
- Small Size High-flux LED : 3.5 x 3.5 x 3.3mm
- Wide Viewing Angle : 55°
- MSL 3

### 2. Applications

- Sensors
- IR Illumination for Cameras
- Surveillance Systems
- Machine Vision Systems

### 3. Outline Drawing and Dimension



**Note**

1. All dimensions are in millimeters
2. All dimensions without tolerances are for reference only

### 4. Absolute Maximum Ratings ( Ta = 25 °C )

Parameter	Symbol	Value	Unit
Power Dissipation per Chip	$P_d$	1.3	W
Continuous Forward Current	$I_F$	700	mA
Peak Forward Current *1	$I_{FP}$	1000	mA
Operating Temperature	$T_{opr}$	-40 ~ 85	°C
Storage Temperature	$T_{stg}$	-40 ~ 100	°C
Soldering Temperature	$T_{sol}$	260 (5sec)	°C

\*1 Duty ratio = 1/10, Pulse width = 1ms

### 5. Electrical & Optical Characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit.
Forward Voltage *2	$V_F$	$I_F = 350\text{mA}$	1.5	-	1.8	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	-	-	10	μA
Radiant Flux *3	$\Phi_e$	$I_F = 350\text{mA}$	218	-	300	mW
Radiant Intensity *4	$I_e$	$I_F = 350\text{mA}$	100	150	-	mW/sr
Peak Wavelength *5	$W_P$	$I_F = 350\text{mA}$	840	-	870	nm
Viewing Angle *6	$2\theta_{1/2}$	$I_F = 350\text{mA}$	-	55	-	deg.

\*2 Forward Voltage has a tolerance of  $\pm 0.05\text{V}$ .

\*3 Radiant Flux is measured with an integrating sphere and has an accuracy of 10%.

\*4 Radiant Intensity is measured at solid angle of  $\Omega = 0.01\text{sr}$  and has an accuracy of 10%.

\*5 Peak Wavelength has an accuracy of  $\pm 0.01\text{nm}$ .

\*6 Viewing Angle is the angle until 50% of brightness measured from the front part of LED.

#### 5.1 Radiant Flux Rank

Rank	Radiant Flux (mW)
V	215 ~ 258
W	258 ~ 300

#### 5.2 Forward Voltage Rank

Rank	Forward Voltage (V)
1	1.5 ~ 1.8

#### 5.3 Peak Wavelength Rank

Rank	Peak Wavelength (nm)
Ic	840 ~ 870

## 6. Typical Characteristic Curve

