

SPECIFICATION

Product : Ceramic 3535 IR LED

Part No. : IWS-C352L-SI-K1

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Proposed By	Checked By	Checked By	Checked By	Approval
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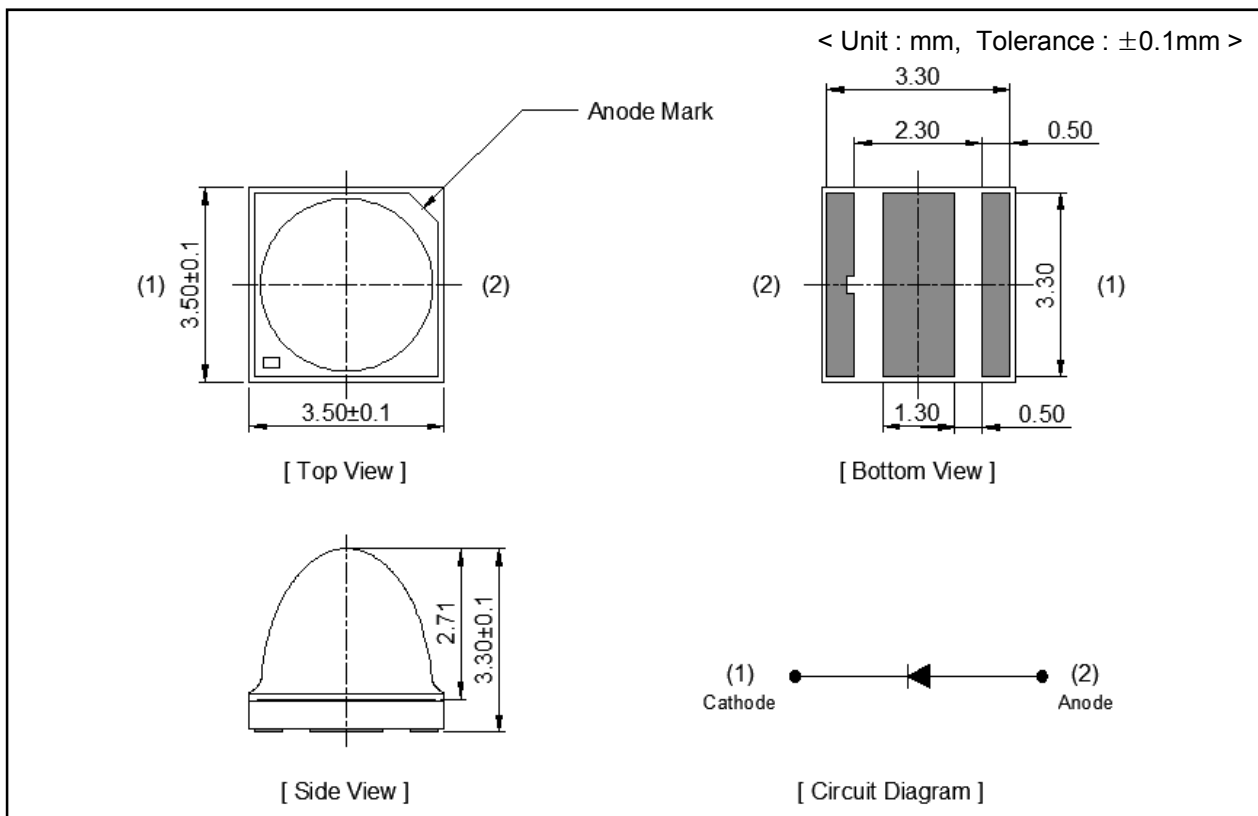
1. Features

- 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	1.61	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	$I_F = 350\text{mA}$	1.7	-	2.1	V
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	10	μA
Radiant Flux *3	Φ_e	$I_F = 350\text{mA}$	215	-	300	mW
Radiant Intensity *4	I_e	$I_F = 350\text{mA}$	100	150	-	mW/sr
Peak Wavelength *5	W_P	$I_F = 350\text{mA}$	720	-	750	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)
5	1.7 ~ 2.1

5.3 Peak Wavelength Rank

Rank	Peak Wavelength (nm)
1a	720 ~ 750

6. Typical Characteristic Curve

