

- Application

3D Depth Sensor

TOF Sensor

IR Illumination

Etc.



- Merit

Narrow beam angle

Optical output power 200mW

MSL3 250°C peak reflow compatible

Thin Package t0.77mm

- Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit	
Continuous Forward Current	If (CW)	300	mA	(Ta=25°C)
Pulse Forward Current 100Hz Duty10% (on time 1ms)	If (Pulse)	500	mA	(Ta=25°C)
Reverse Voltage	Vr	5	V	(Ta=25°C)
Junction temp.	Tj	125	°C	
Solder reflow temp.	Tsr	250(10sec)	°C	
Operating temp.	Top	-20 to 70	°C	
Storage temp.	Tstg	-40 to 100	°C	

Condition : mounted on AL board with Heatsink

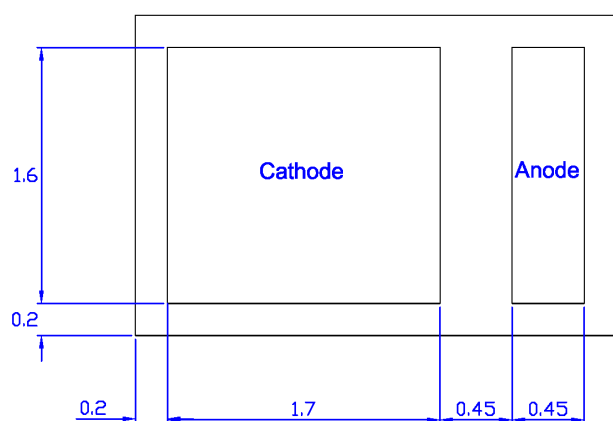
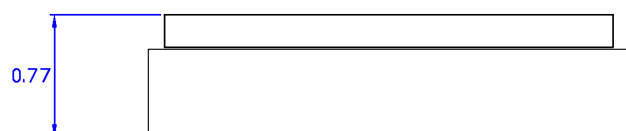
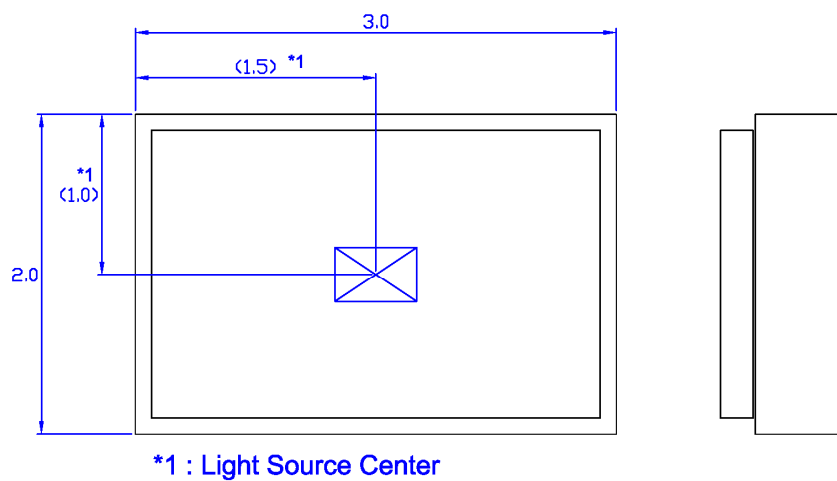
- Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Threshold current	Ith	—	—	70	100	mA
Optical Power	Po	If=300mA (tp=800μsec)	140	200	260	mW
Forward voltage	Vf	If=300mA (tp=800μsec)	—	2.0	2.6	V
Beam divergence	FWHM	If=300mA (tp=800μsec)	—	13	—	deg
Conversion efficiency	PCE	If=300mA (tp=800μsec)	—	33	—	%
Slope efficiency	η	If (100mA to 300mA)	0.5	0.85	1.1	W/A
Peak Wavelength	λp	If=300mA (tp=800μsec)	930	940	950	nm
λ temp variation	Δλ/ΔT	—	—	0.07	—	nm/°C
ESD damage threshold	ESD HBM	Human Body Model	2000	—	—	V

Condition: Ta=25°C with Heatsink.

Caution: The data above is used as reference only, i.e. not specification guarantee. Specifications and data are subject to change without notice.

## ●Dimensions



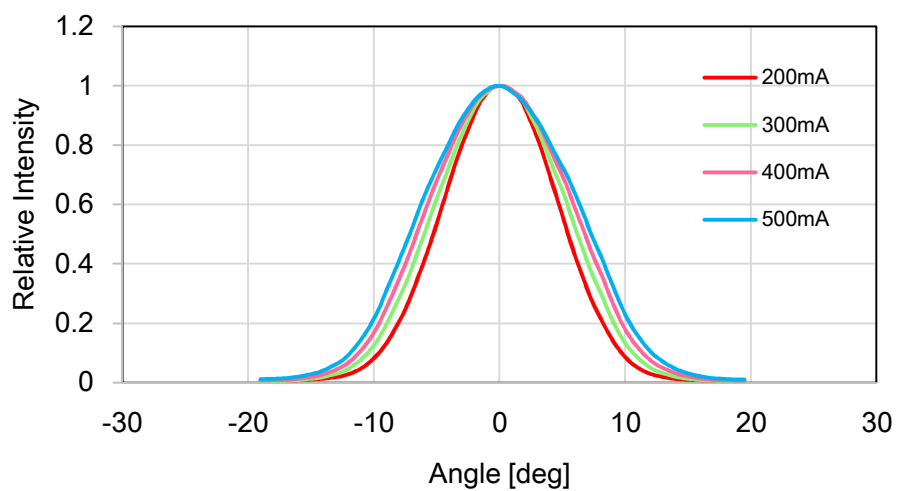
Unit : mm



### Note

- Unspecified tolerance shall be  $\pm 0.15\text{mm}$
- Dimensions do not include burrs  
(Max burr size  $+0.25\text{mm}$ )

## ●Beam Divergence Data



Condition : PKG individual piece , Pulse 50kHz Duty50% (on time 10us)

## Notes

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