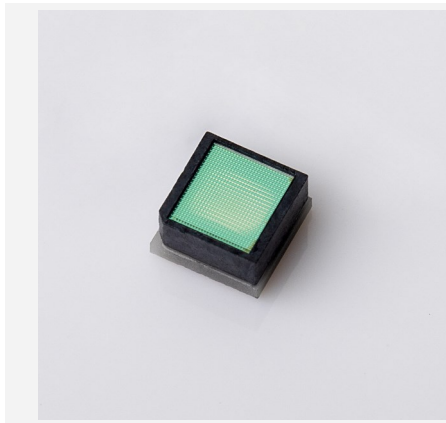


# DMS VCSEL Illuminator

## AT01 Series



### Features

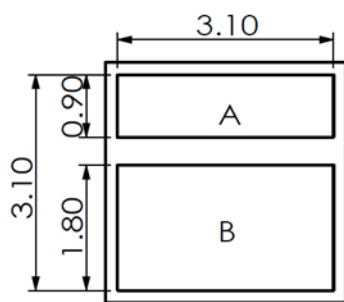
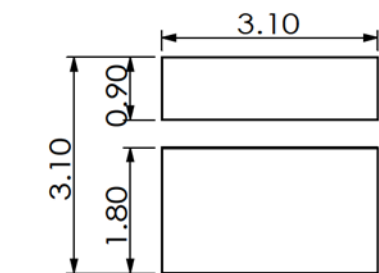
- Automotive grade glass diffuser
- Wide field of view up to 160°
- Standard package 3535

### Applications

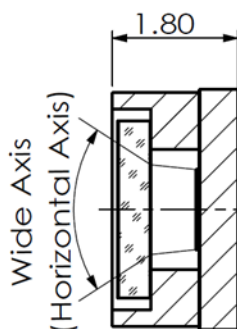
- Driver Monitoring System
- Face Recognition
- Lighting
- 3D Sensing

### Product Dimensions (mm)

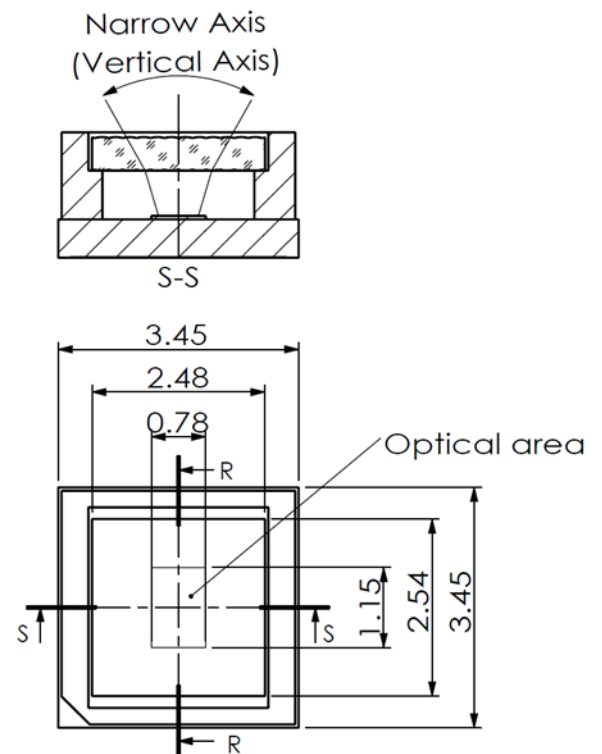
Recommended Soldering Pad :



A: Anode  
B: Cathode



R-R



**Remark:** The structure drawing is for reference only. Please feel free to contact us for any special requirements.

## Product Specifications (Prototype)

<b>Product Code</b>	(Typical Customization)
Part No. <sup>1</sup>	FL-AT01-3-940-HxV
Test Condition	300μs, 300Hz, 9% DC, 25°C

Optical Data	Unit	Value
Centroid Wavelength $\lambda$	nm	940±5
Output Power <sup>2</sup>	W	> 3
Output Power Decay	% / °C	-0.85
FOV @ FWHM (Typical, Horizontal x Vertical)	°	120x20
Spectral Width FWHM	nm	< 3
Wavelength Temp. Coefficient	nm / °C	0.08

Electrical Data		
Threshold Current $I_{th}$	A	< 0.5
Operating Current $I_{op}$	A	3.5
Forward Voltage $V_{op}$	V	< 2.5
Slope efficiency	W/A	> 0.8
Power conversion efficiency	%	> 32

Other Data		
Storage Temperature	°C	-40~105

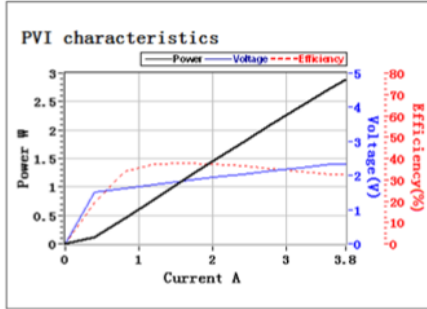
<sup>1</sup> Part No. = Brand Code - Series - Power - Centroid Wavelength - FOV (Horizontal x Vertical).

<sup>2</sup> A non-condensing environment is required for storage and operation below ambient dew point.



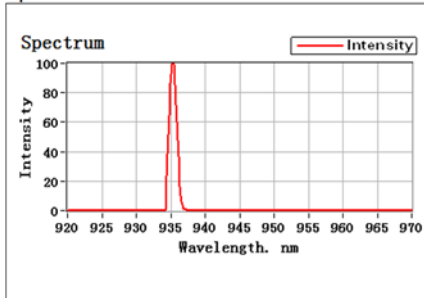
## Product Test Results (Prototype)

### L-I Test



Peak Pop(W)	2.88
Iop(A)	3.80
Ith(A)	0.29
Slope Eff.(W/A)	0.83
Average Pop(W)	0.26
Eff.@Iop(%)	32.46
V @Iop(V)	2.33
Temp.(°C)	25.00

### Spectrum Test



Peak wavelength(nm)	935.34
Centroid wavelength(nm)	935.47
FWHM(nm)	1.36
FW90% Energy(nm)	1.94

