



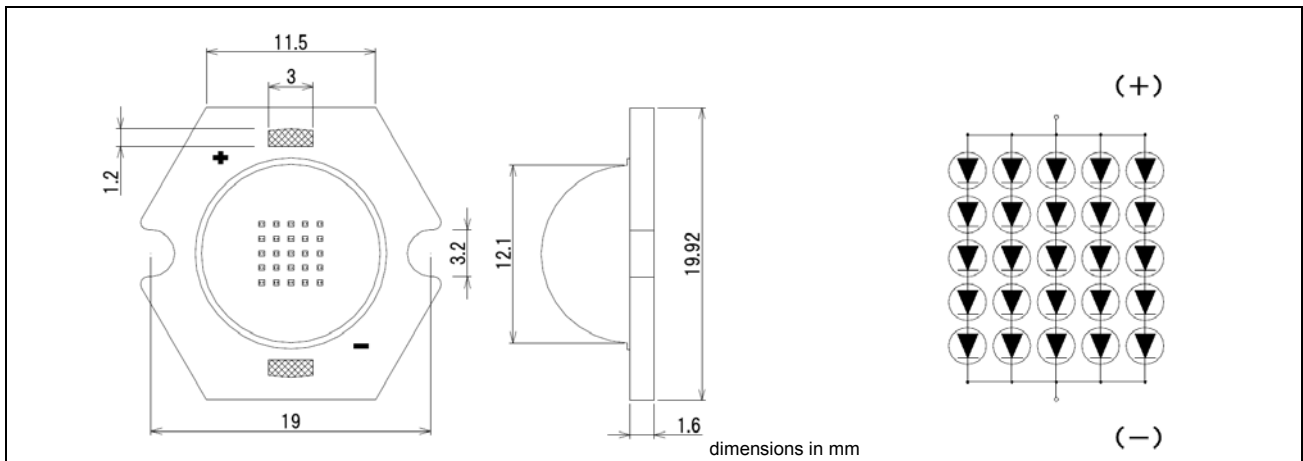
XML-385-SD

TECHNICAL DATA

UV LED Array, SMD

XML-385-SD is an ultra high power multi emitter LED array, utilizing 25 LED chip dies on a ceramic SMD submount and UV resistant silicone resin lens. It complies with RoHS directive

Drawing & electrical layout



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

Item	Symbol	Value	Unit
DC Forward Current	I_F	350	mA
Power Dissipation *2	P_D	8.75	W
Operating Temperature	T_{OP}	-25 ... +80	$^\circ\text{C}$
Storage Temperature	T_{STG}	-30 ... +100	$^\circ\text{C}$
Soldering Temperature *1	T_{SOL}	260	$^\circ\text{C}$

- * Note:
 1. for 3 sec.
 2. 5°C/W heat sink required

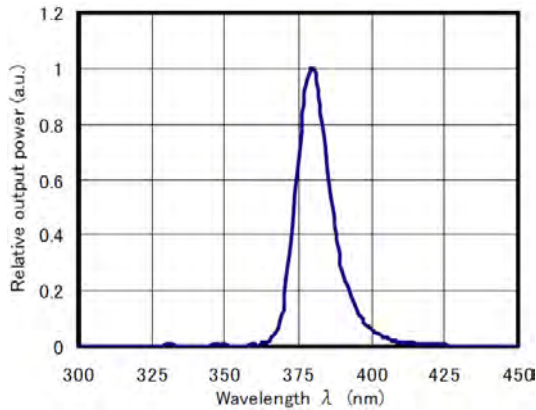
Specifications ($I_f=300\text{mA}$, $T_a=25^\circ\text{C}$)

Item	Symbol	Min.	Typ.	Max.	Unit
Electrical Specification					
Forward Voltage	U_F	18	21	25	V
Optical Specification					
Optical Power *1	P_O	-	1000	-	mW
Peak Wavelength *2	λ_P	380	-	390	nm
Spectral Half Width (FWHM)	λ	10	-	20	nm
Viewing Angle	φ	140			deg.

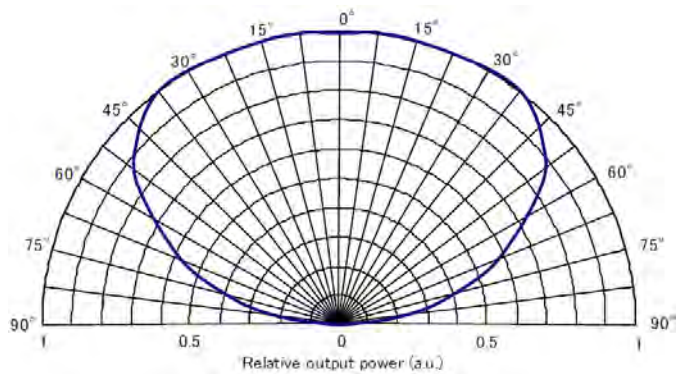
- * Note:
 1. measurement tolerance is $\pm 10\%$
 2. measurement tolerance is $\pm 2\text{ nm}$



Spectrum ($T_a=25^\circ\text{C}$, $I_F=300\text{ mA}$)



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



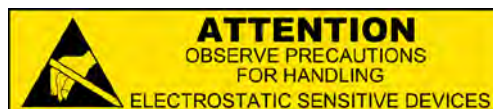
Precaution for Use

1. Cautions

- This device is a UV LED, which radiates intense UV light during operation.
- DO NOT look directly into the UV light or look through the optical system. To prevent inadequate exposure of UV radiation, wearing UV protective glasses is recommended

2. Static Electricity

- The LEDs are very sensitive to Static Electricity and surge voltage. So it is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.
- All devices, equipment and machinery must be grounded properly. It is recommended that precautions should be taken against surge voltage to the equipment that mounts the LEDs.



3. Heat Generation

- Thermal design of the end product is of paramount importance. Please consider the heat generation of the LED when making the system design. The coefficient of temperature increase per input electric power is affected by the thermal resistance of the circuit board and density of LED placement on the board, as well as other components. It is necessary to avoid intense heat generation and operate within the maximum ratings given in the specification.
- The operating current should be considered taking into account the environmental temperature and the capacity of the cooling solution

