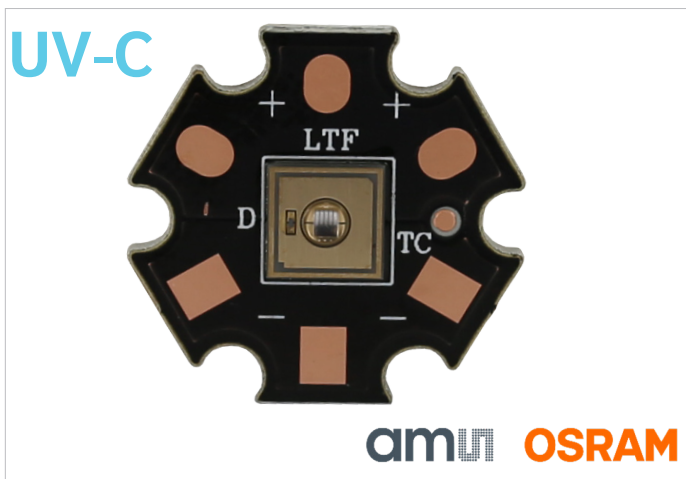


QLUXUVCR202W1LED265

Copper Core Star UV-C Board



Package	Copper Core PCB
Chip Technology	AlGaIn based flip chip
Typ. Radiation	150°
Color	λ_{peak} 265 nm (ultraviolet UV-C)
ESD	2 kV
Radiant Flux	100mW (typ.) @250mA
Radiant Efficiency	typ. 5.7%

The compact UV-C LED is part of the OSRON UV Series. It offers high efficiency in high power class.

FEATURES

- Copper core PCB with low thermal resistance
- Chip technology: AlGaIn based flip chip
- Typ. Radiation: 150°
- Color: peak = λ_{peak} 265nm (ultraviolet (UV-C))
- ESD: 2kV acc. to ANSI/ESDA/JEDEC JS-001 (HBM)
- Radiant Flux (typ.) 100mW
- Radiant Efficiency typ. 5.7%
- OSRAM UVC LED

APPLICATIONS

- Agriculture
- Horticulture
- UV-C Treatment
- Disinfection
- Water Treatment
- Industrial Applications

MODEL SPECIFICATIONS

Model	Total radiant flux
QLUXUVCR202W1LED265	90.0 ... 130.0 mW@250mA

RECOMMENDED LTF DRIVER

Model	Input Voltage	Wattage	Output Voltage	Output Current
DS2W250C0510B5ND	120V - 277V AC	2W	05V - 10V DC	250mA
DS5W200C0524B5ND	120V - 277V AC	5W	05V - 24V DC	200mA

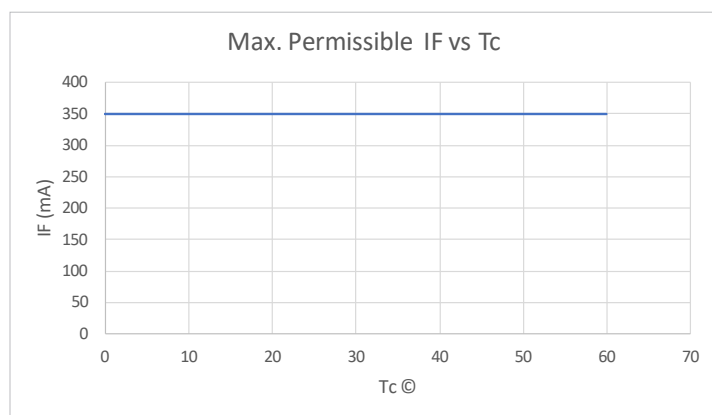
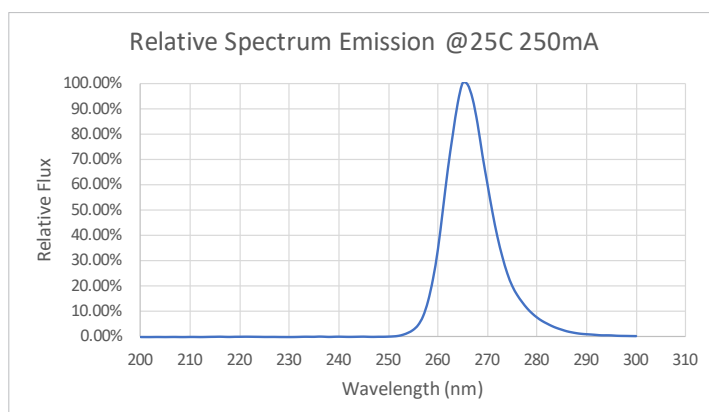
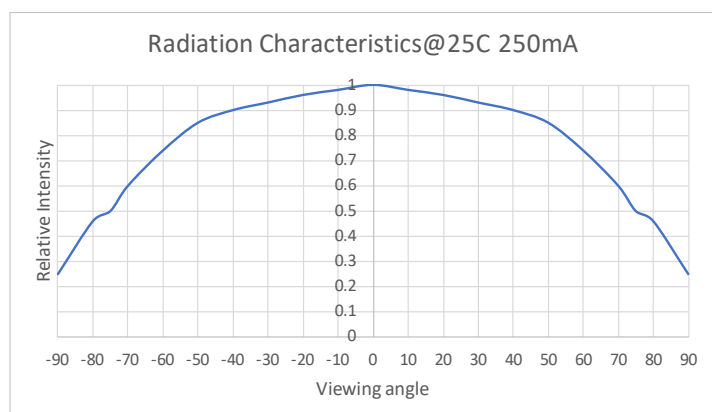
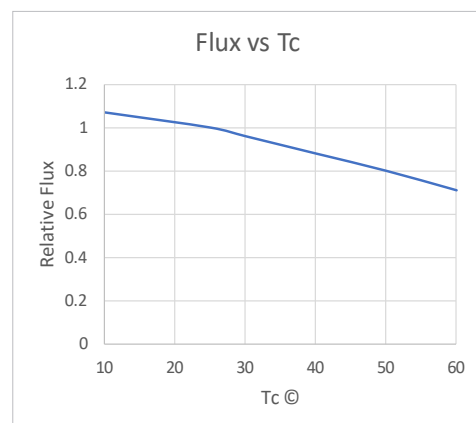
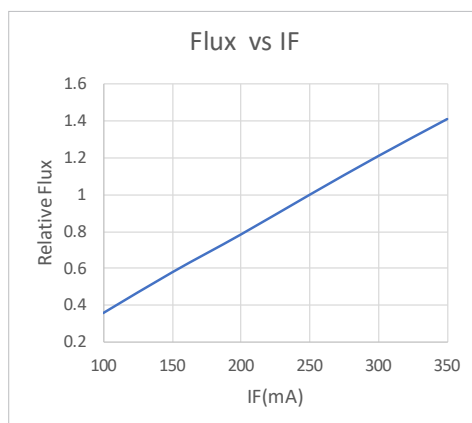
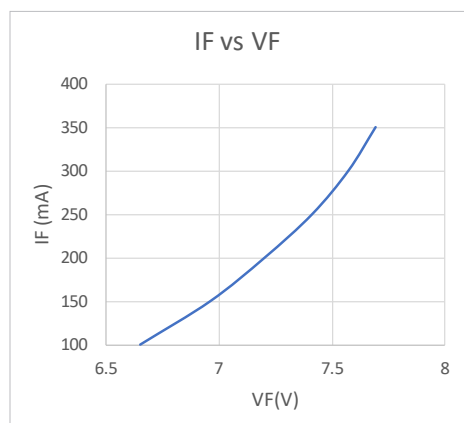
UV-C MAXIMUM RATINGS

Parameter	Symbol		Values
Operating Temperature	T_{op}	min.	10°C
		max.	60° C
Storage Temperature	T_{stg}	min.	-30°C
		max.	75°C
Junction Temperature	T_j	max.	75°C
Forward current $T_s=25^{\circ}\text{C}$	I_F	min.	100 mA
		max.	350 mA
Surge Current $T_s=25^{\circ}\text{C}$	I_{FS}	max.	500 mA
ESD withstand voltage acc. to ANSI/ESDA/JEDEC JS-001 (HBM)	V_{ESD}		2 kV

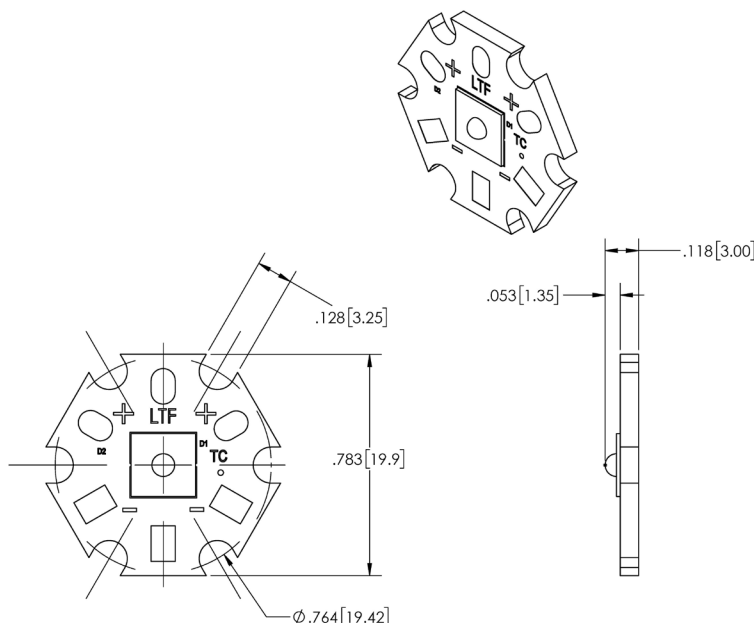
CHARACTERISTICS

$I_F=250\text{ mA}; T_s=25^{\circ}\text{C}$

Parameter	Symbol		Values
Peak Wavelength	λ_{peak}	min.	260 nm
		typ.	265 nm
		max.	270 nm
Viewing angle at 50% I_y	2ϕ	typ.	150°
Forward Voltage ³⁾	V_F	min.	5.50 V
		typ.	7.00 V
		max.	7.50 V
Real thermal resistance junction/solderpoint ₄₎	$R_{thJS\ real}$	typ.	4.4 K / W
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e=5.7\%$	$R_{thJS\ real}$	typ.	4.1 K / W



MECHANICAL SPECS



Notes

The evaluation of eye safety occurs according to the standard IEC 62471:2006 (photo biological safety of lamps and lamp systems). Within the risk grouping system of this IEC standard, the device specified in this data sheet falls into high risk group – RG 3. **WARNING - UV emitted from this product. Avoid eye and skin contact to unshielded product.** Subcomponents of this device contain, in addition to other substances, metal filled materials including silver.

Metal filled materials can be affected by environments that contain traces of aggressive substances. Therefore, we recommend that customers minimize device exposure to aggressive substances during storage, production, and use. Devices that showed visible discoloration when tested using the described tests above did show no performance deviations within failure limits during the stated test duration. Respective failure limits are described in the IEC60810.

UV-C RISK GROUP 3



WARNING UV-C emitted from this product.
Avoid eye and skin exposure to unshielded product.
Follow installation instructions and user manual.