

LED MODULE VIOLET UVC 281mm x 19.2mm 840mW

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Applications

- Medical sterilization
- Drinking water disinfection
- Infectious disease control
- Food processing sterilization
- Air sterilization

Characteristics

- UV Type - UVC
- Wavelength – 260-270nm
- Efficacy - up to 2.1%
- L70 > 20,000h
- 05 years warranty



KLARAN
CONFIDENT

DRIVING CURRENTS

Parameter	Nominal	Max
LED MODULE VIOLET UVC 281mm x 19.2mm 840mW	1,000 mA	1,200 mA

ELECTRICAL PARAMETERS

Parameter	Typical Value	Units
I _{board}	1000	mA
VCC,max (I2C Components)	3.3	V
SDA, SCL (I2C Components)	3.3	V
Frequency I2C	100	kHz

MECHANICAL PARAMETERS

Parameter	Typical Value	Units
Thermal Conductivity of Dielectric PCB Material	3	W/mK
Board Thickness	1.6	mm
Tc (temperature at Tc point)	25	°C

CRITICAL COMPONENT LIST

- UVC LED: KL265-50V-SM-WD-TF
- I2C Temperature Sensor: TMP102 (acceptable substitutes TMP102-Q1, TMP112A, TMP112B, TMP112N)
- I2C EEPROM: 24AA16-I/OT (acceptable substitutes 24AA16-E/OT, 24LC16B-I/OT, 24LC16B-E/OT, 24FC16-I/OT, 24FC16-E/OT)
- SM4007PL (acceptable substitutes SM4003PL, SM4004PL, SM4005PL, SM4006PL)
- Thermal Interface Material: FlexGRAF FG700

MODULE TEMPERATURES

Parameter	Nominal	Max
Tc (temperature at Tc point)	40 °C	60 °C

PRODUCT PART NUMBER

80413200100

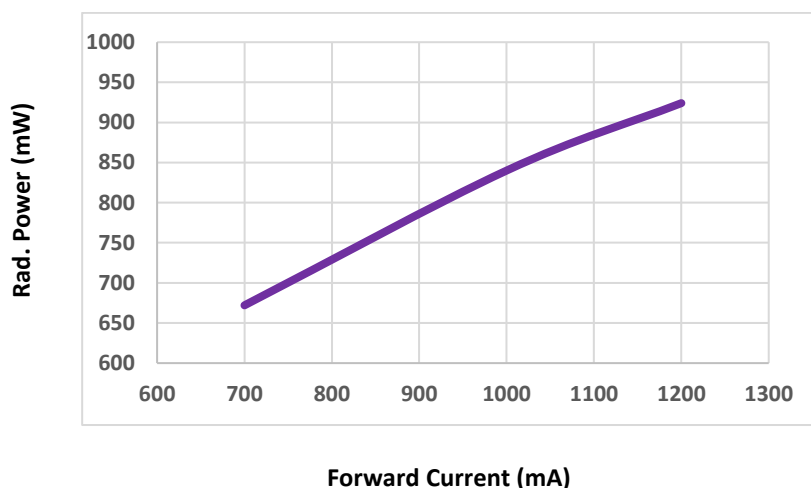
UVC LED MODULE VIOLET UVC 12 LEDS EEPROM 840MW 317X76,2X50,8MM – 260-270 nm

TECHNICAL INFORMATION

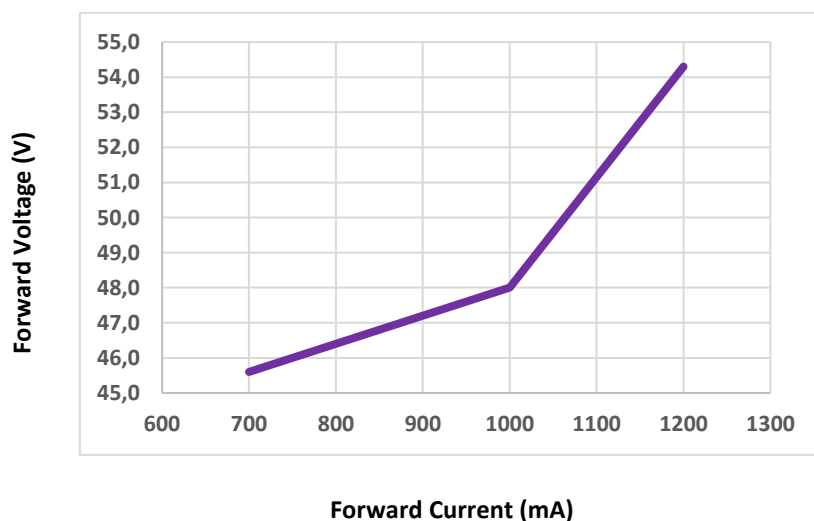
UV Type	Wavelength (nm)	#LEDs	Forward Current (mA)	Rad. Power (mW)	Forward Voltage (V)	Power (W)	Ts (°C)	EFF (%)
UVC	260-270nm	12	700	576	45.6	31.9	40	2.1
			1,000	840	48.0	48.0	40	1.8
			1,200	792	54.0	64.8	40	1.4

TECHNICAL GRAPHS

Rad. Power (mW) x Forward Current (mA) (Tj 50°C)



Forward Voltage (V) x Forward Current (mA) (Tj 50°C)

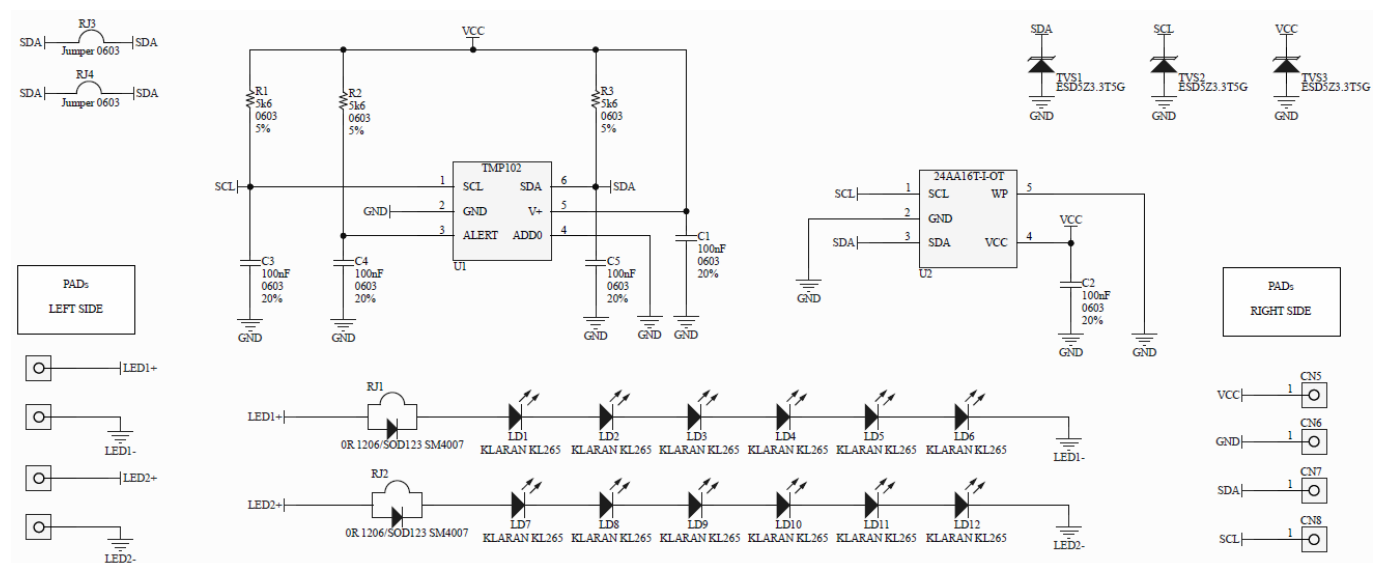


LED TYPE

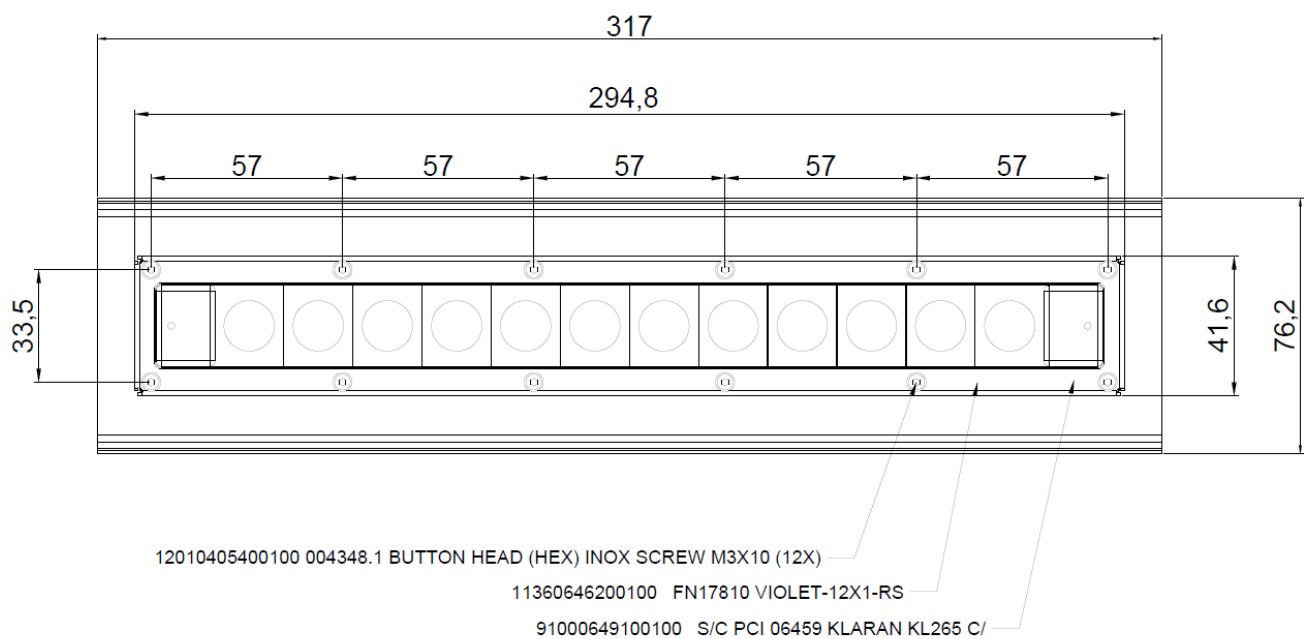
Manufacturer: Crystal IS, Klaran

LED Series: KL265

SCHEMATICS



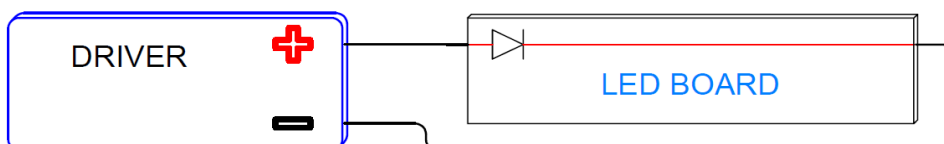
MECHANICAL DRAWING



Unit: mm

WIRING

Specification item	Value	Unit	Condition
Input wire cross- section	0.25...0.75 18...24	mm ² AWG	Solid wire
Input wire strip length	7.5...8.5	mm	Solid wire
Input wire cross-section	0.33...0.5 20...22	mm ² AWG	Stranded wire
Input wire strip length	7.5...8.5	mm	Stranded wire



COMPATIBLE OPTICS

Manufacturer	Part Number	Color	Beam
LEDiL	FN17810_VIOLET-12X1-RS	Clear	~14°
LEDiL	FN17294_VIOLET-12X1-S	Clear	~20°
LEDiL	FN17818_VIOLET-12X1-W	Clear	~60°



WARNING

