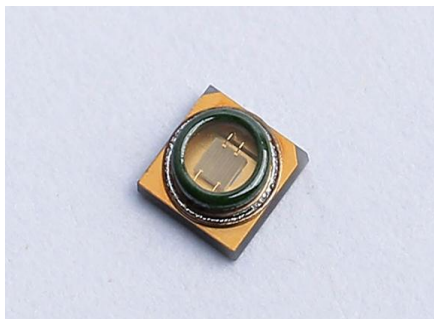




Model: UVABC-3535F-LI GSQ



General Features

UVA+UVB+UVC photodiode
Photovoltaic mode operation
SMD 3535 ceramic inorganic package
Good visible blindness
High responsivity and low dark current

Applications

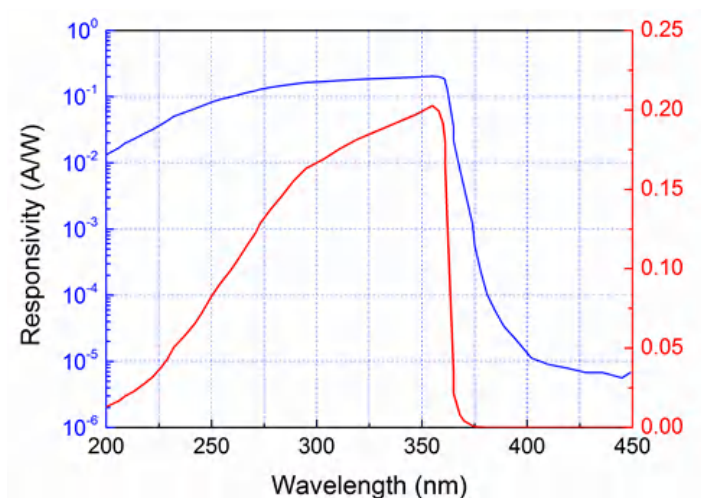
Air purification, water quality measurement

Specifications

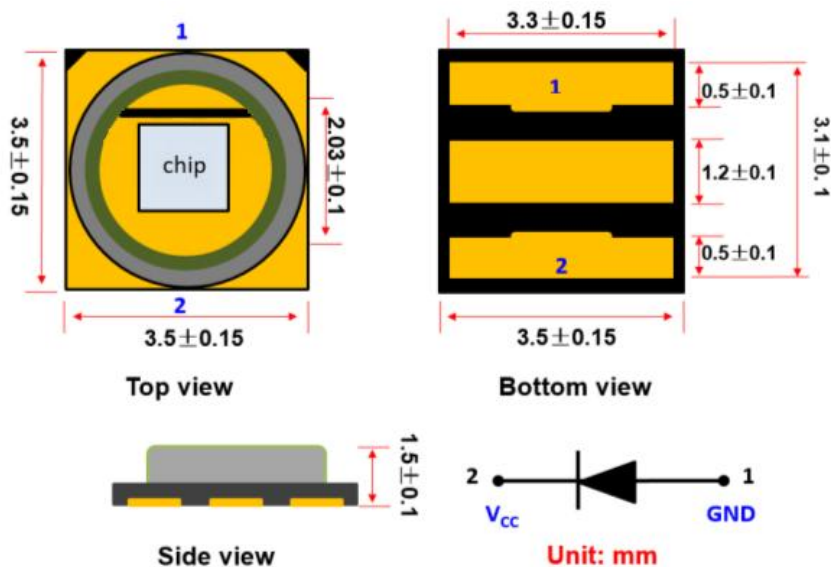
Parameters	Symbol	Value	Unit
Maximum ratings			
Operation temperature range	T_{opt}	-25-85	°C
Storage temperature range	T_{sto}	-40-85	°C
Soldering temperature (3 s)	T_{sol}	260	°C
Reverse voltage	V_{r-max}	-10	V
General characteristics (25 °C)			
Chip size	A	1	mm ²
Dark current ($V_r = -1$ V)	I_d	<1	nA
Temperature coefficient (@265 nm)	T_c	0.05	%/°C
Capacitance (at 0 V and 1 MHz)	C_p	18	pF
Spectral response characteristics (25 °C)			
Wavelength of peak responsivity	λ_p	355	nm
Peak responsivity (at 355 nm)	R_{max}	0.20	A/W
Spectral response range ($R=0.1 \times R_{max}$)	-	210-370	nm
UV-visible rejection ratio ($R_{max}/R_{400\text{ nm}}$)	-	>10 ⁴	-



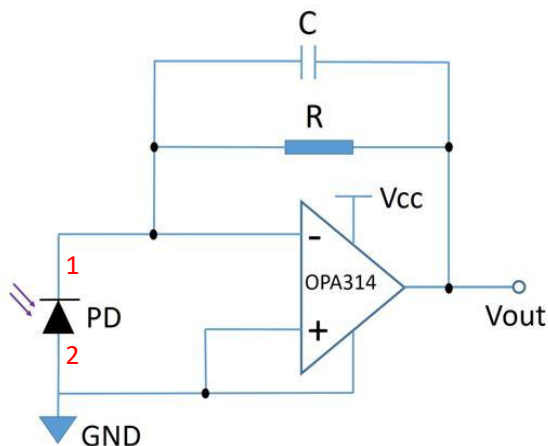
Spectral response



Package dimensions



Application circuit



$$V_{out} (V) = I_{ph} (A) \times R (\Omega)$$

$$I_{ph} (A) = R_{\lambda} (A/W) \times A (cm^2) \times P (W/cm^2)$$

where A is chip area, P is incident UV power density and R_{λ} is responsivity at specific wavelength.