



Features

- UVC selective photodiode
- Optimally suited for detection and control of UVC radiation
- Intrinsicly unresponsive in the UVA, UVB and in the visible due to the wide-bandgap semiconductor material AlGaN
- TO-18 metal package with 0,076 mm² active chip area
- High speed and low noise
- Spectral response in accordance with DVGW W 294

Eigenschaften

- UVC selektive Photodiode
- Optimale Eignung für die Messung von UVC-Strahlung
- Inhärent unempfindlich gegen UVA, UVB und sichtbares Licht durch AlGaN-Halbleiter mit hoher Bandlücke
- TO-18 Metallgehäuse mit 0,076 mm² aktiver Chipfläche
- Schnelle Photodiode mit niedrigem Rauschen
- Spektrale Empfindlichkeit in Übereinstimmung mit DVGW W 294

Ultraviolet selective AlGaIn based UV sensor



AG28S

Maximum Ratings

Parameter	Symbol	Value	Unit
Operating temperature range	T_{opt}	-25 ... +80	°C
Reverse voltage	V_{Rmax}	5	V

General Characteristics

($T_a = 25\text{ °C}$)

Parameter	Symbol	Value	Unit
Active area	A	0.076	mm ²
Dark current at 0.1 V reverse bias	I_d	100	fA
Capacitance	C	24	pF
Short circuit current for 10 mW/cm ² @ 254 nm	I_0	ca. 300	nA

Spectral Characteristics

($T_a = 25\text{ °C}$)

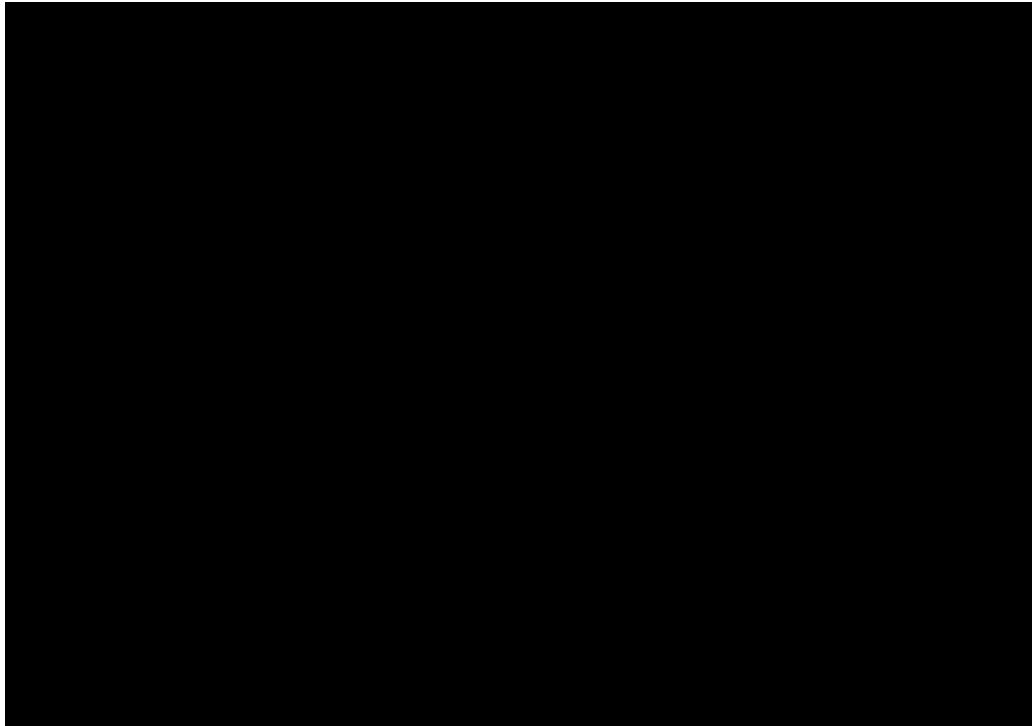
Max. spectral sensitivity	S_{max}	0.045	A W ⁻¹
Wavelength of max. spectral sensitivity	λ_{Smax}	270	nm
Range of spectral sensitivity (S=0.1*S _{max})	-	225 - 285	nm

Ultraviolet selective AlGaN based UV sensor

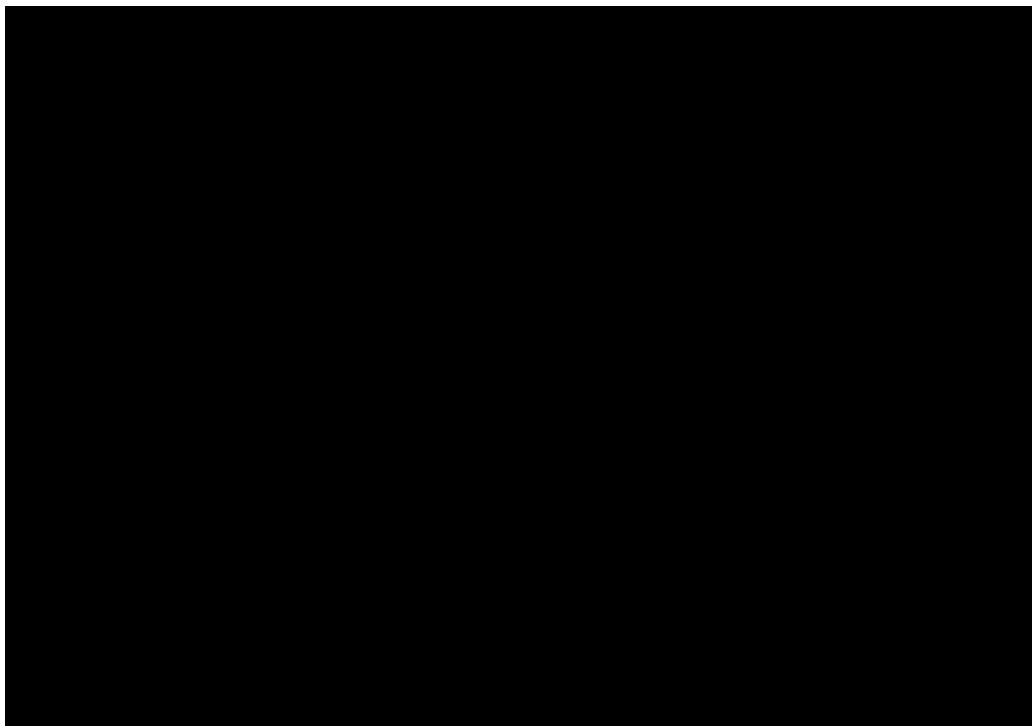


AG28S

Linear Spectral Response



Logarithmic Spectral Response

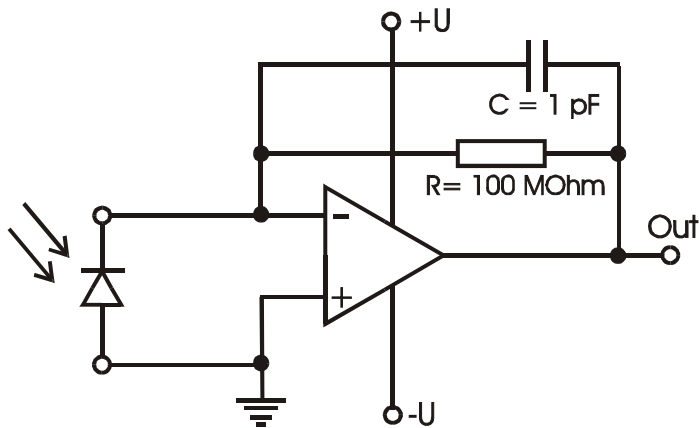


Ultraviolet selective AlGaN based UV sensor



AG28S

Application Example



Pin Layout

