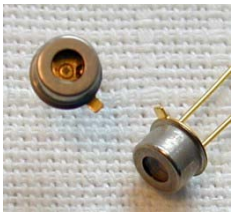
AG38S
Broad Band (Al)GaN based UV photodiode *A* = 0,076 mm²

General Features



Properties of the AG38S UV photodiode

- Broad Band UVA+UVB+UVC photodiode
- Active Area *A* = 0,076 mm²
- TO18 metal housing
- 10mW/cm² peak radiation results a current of approx. 700 nA

About the material (Aluminium)Gallium Nitride (Al)GaN

(Al)GaN is a new semiconductor material for visible blind UV photodiodes. By modification of the Al – to - Ga stoichiometry it is possible to produce photodiodes with different spectral behaviour. This allows to offer Photodiodes sensible for broad band UV (UVA+UVB+UVC), for UVB-only and for UVC only without using a filter.

Specifications

Parameter	Symbol	Value	Unit
Maximum Ratings			
Operating Temperature Range	T_{opt}	*-25 … +70*	*°C*
Storage Temperature Range	T_{stor}	*0 … +100*	*°C*
Soldering Temperature (3s)	T_{sold}	*260*	*°C*
Reverse voltage	V_{Rmax}	*5*	*V*
General Characteristics (*T*=25°C)			
Active Area	*A*	*0,076*	*mm²*
Dark current (1V reverse bias)	I_d	*100*	*fA*
Capacitance	*C*	*24*	*pF*
Short circuit (10mW/cm² at peak)	I_0	*700*	*nA*
Temperature coefficient	*Tc*	*<-0,3*	*%/K*
Spectral Characteristics (*T*=25°C)			
Max. spectral sensitivity	S_{max}	*0,130*	*AW¹*
Wavelength of max. spectral sens.	λ_{max}	*350*	*nm*
Sensitivity range (S=0,1*S_{max})	-	*220 … 370*	*nm*
Visible blindness (S_{max} / $S_{>400nm}$)	*VB*	*>10²*	-

Manufacturer: **sg***lux* GmbH; Agent: Boston Electronics, 91 Boylston St, Brookline MA 02445 USA (800)347-5445 or (617)566-3821; fax (617)731-0935; uv@boselec.com ; www.boselec.com

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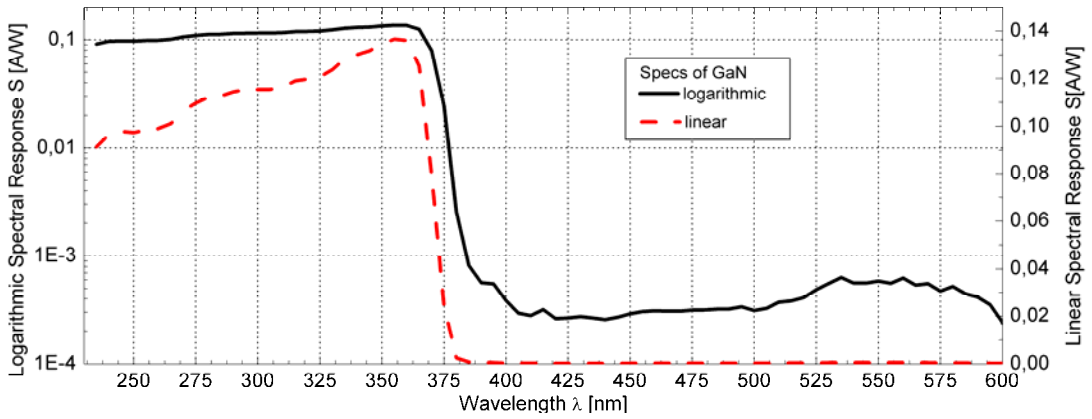
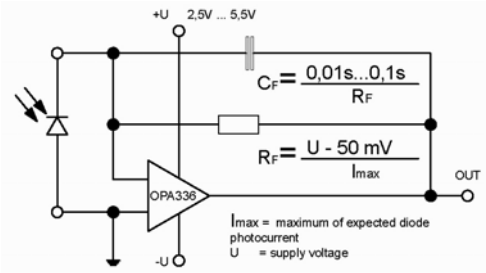
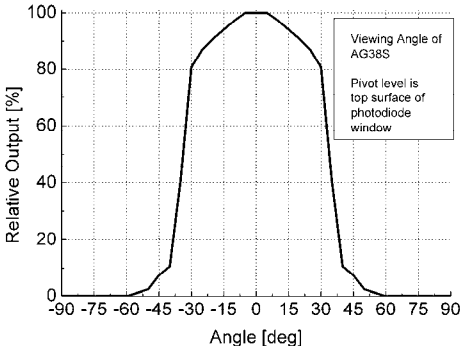
Spectral Response



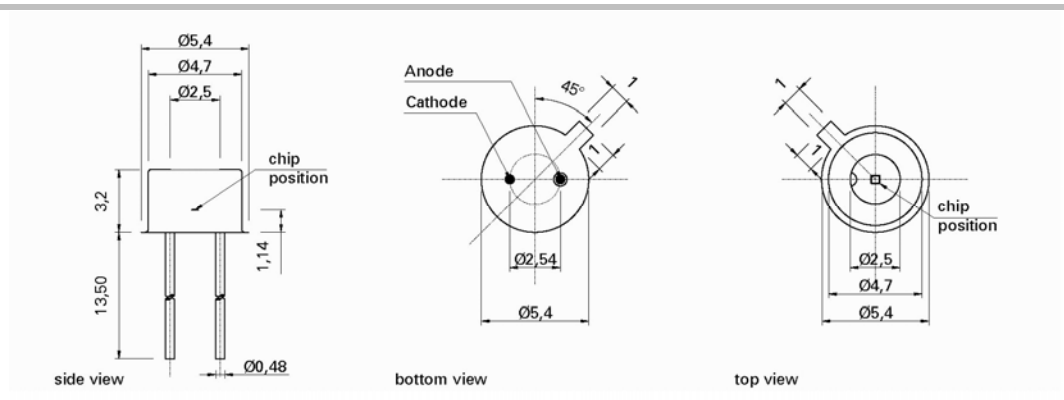
Circuit



Viewing Angle



Drawing



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