

Features

- Schottky-type photodiode
- Intrinsic visible blindness due to wide-bandgap semiconductor material
- Large photoactive area
- No focusing lens needed, therefore large usable incident angle
- No interference filter required
- Designed to operate in photovoltaic mode
- TO-18 metal package

Maximum Ratings

Parameter	Symbol	Value	Unit
Operating temperature range	T_{opt}	-20 ... +80	°C
Reverse voltage	V_{Rmax}	3	V
Forward current	I_{Fmax}	1	mA
Total power dissipation at 25°C	P_{tot}	1	mW

TW30SX

General Characteristics

($T_a = 25\text{ °C}$)

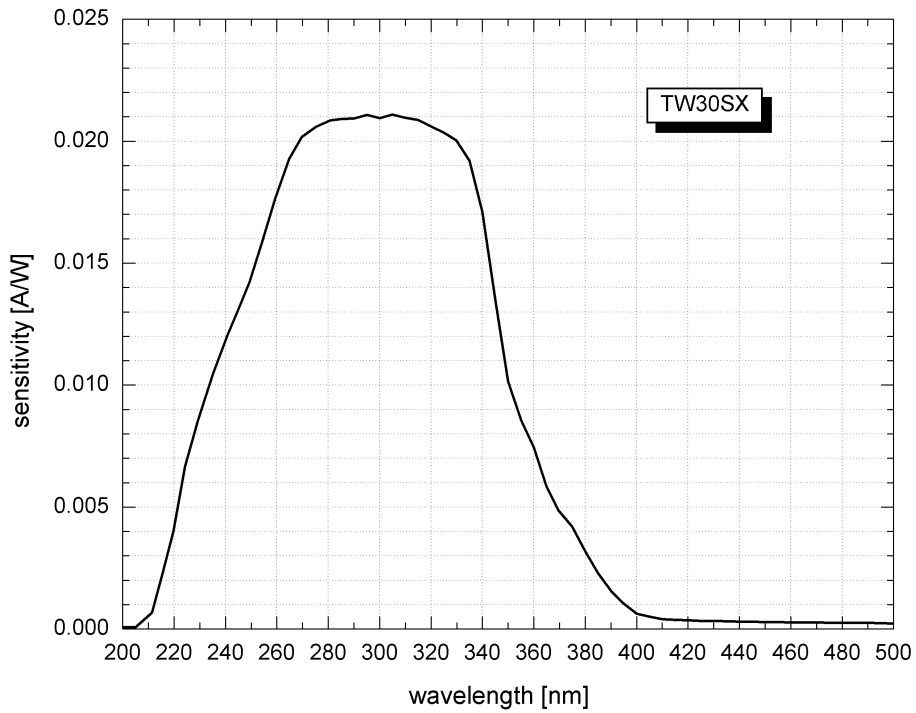
Parameter	Symbol	typical Value	garanteed Value	Unit
Active area	A		4.18	mm ²
Active area dimensions	L x W		2.2 x 1.9	mm ²
Max. viewing angle	α		70	degree
Shunt resistance (dark)	R_s		40	M Ω
Dark current at 10mV reverse bias	I_d		30	pA
Open circuit voltage (200 μ W/cm ² , $\lambda=300$ nm)	V_0	420	300	mV
Short circuit current (200 μ W/cm ² , $\lambda=300$ nm)	I_0	350	200	nA
Breakdown voltage (dark)	V_{BR}		> 3	V

Spectral Characteristics

($T_a = 25\text{ °C}$)

Parameter	Symbol	garanteed Value	Unit
Max. spectral sensitivity	S_{max}	21	mA W ⁻¹
Wavelength of max. spectral sensitivity	λ_{Smax}	300	nm
Range of spectral sensitivity (S=0.1*S _{max})	-	215 – 387	nm
Visible blindness	$\frac{S_{max}}{S_{400nm}}$	50	

Spectral Response



Pin Layout

