

### **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
- Designed to operate in photovoltaic mode
- TO-39 metal package

### **Maximum Ratings**

Parameter	Symbol	Value	Unit
Operating temperature range	$T_{opt}$	-20 ... +80	°C
Reverse voltage	$V_{Rmax}$	3	V
Forward current	$I_{Fmax}$	5	mA
Total power dissipation at 25°C	$P_{tot}$	5	mW

## TW30SY

### General Characteristics

(T<sub>a</sub> = 25 °C)

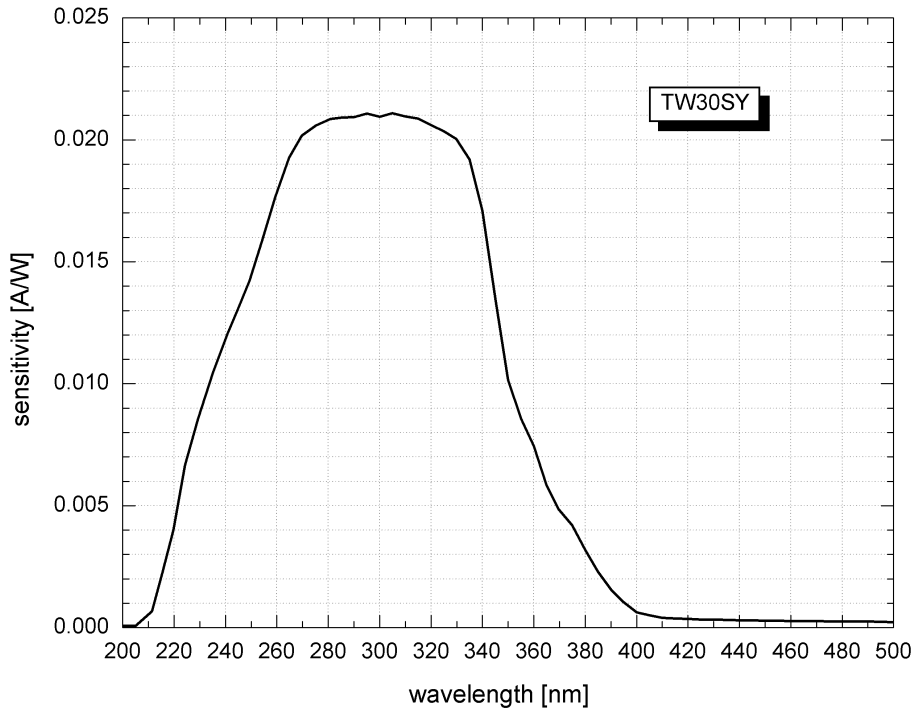
Parameter	Symbol	typ. Value	Unit
Active area	A	15.66	mm <sup>2</sup>
Active area dimensions	L x W	5.4 x 2.9	mm <sup>2</sup>
Max. viewing angle	α	app. 80	degree
Shunt resistance (dark)	R <sub>s</sub>	10	MΩ
Dark current at 10mV reverse bias	I <sub>d</sub>	100	pA
Open circuit voltage (200μW/cm <sup>2</sup> , λ=300nm)	V <sub>0</sub>	120	mV
Short circuit current (200μW/cm <sup>2</sup> , λ=300nm)	I <sub>0</sub>	650	nA
Breakdown voltage (dark)	V <sub>BR</sub>	> 3	V

### Spectral Characteristics

(T<sub>a</sub> = 25 °C)

Parameter	Symbol	typ. Value	Unit
Max. spectral sensitivity	S <sub>max</sub>	21	mA W <sup>-1</sup>
Wavelength of max. spectral sensitivity	λ <sub>Smax</sub>	300	nm
Range of spectral sensitivity (S=0.1*S <sub>max</sub> )	-	215 – 387	nm
Visible blindness	$\frac{S_{max}}{S_{400nm}}$	50	

### Spectral Response



### Pin Layout

