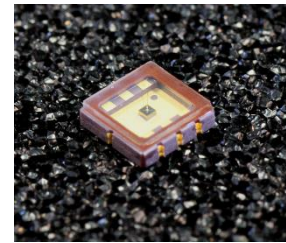




ifw optronics	<b>SiC-Photodiode – 0,25 mm<sup>2</sup> in SMD Package</b> <b>JEA0,25-5SQ</b>
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**Characteristics :**

- ◆ medium area SiC-photodiode for UVA, UVB and UVC
- ◆ ceramic HTCC package with quartz window
- ◆ active area: 0,25 mm<sup>2</sup>
- ◆ spectral range: 210 ... 355 nm
- ◆ high UV-responsivity: 0,16 A/W
- ◆ RoHS, REACH and WEEE conform



**Applications :**

- ◆ universal UV measurements
- ◆ sterilisation lamp control
- ◆ flame detection

**Maximum ratings :**

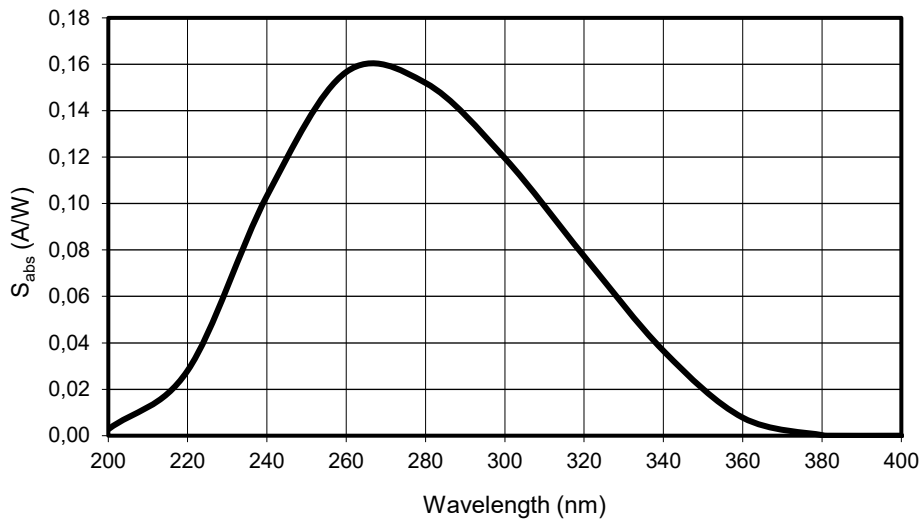
- ◆ reverse voltage: 20 V
- ◆ operating temperature: - 55 °C ... 175 °C
- ◆ storage temperature: - 55 °C ... 175 °C
- ◆ solder temperature: 245 °C (10 sec.)

**Technical Specifications :**

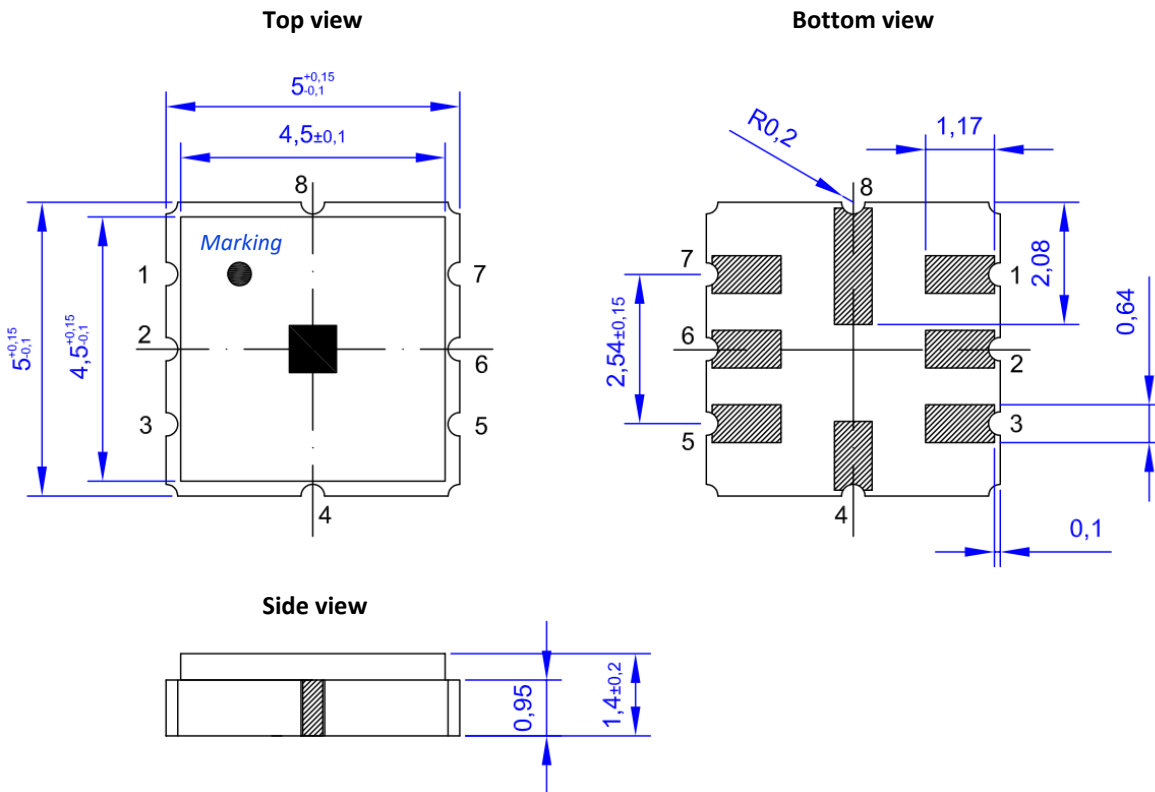
Parameter	Test-Parameter	Typical Values	Unit
chip dimensions		675 x 675	µm <sup>2</sup>
active area		0,25	mm <sup>2</sup>
spectral range	$S = 0,1 \times S_{max}$		
λ <sub>short</sub>		210	nm
λ <sub>long</sub>		355	nm
wavelength of maximum responsivity λ <sub>max</sub>		265	nm
maximum responsivity S <sub>max</sub>	$\lambda = \lambda_{max}$	0,16	A/W
spectral responsivity S <sub>254nm</sub>	$\lambda = 254 \text{ nm}$	0,145	A/W
dark current I <sub>R</sub> (max.)	V <sub>R</sub> = 1 V	10 (100)	fA
junction capacitance C <sub>j</sub>	f = 10 kHz	75	pF

Test conditions, as not otherwise specified: T<sub>A</sub> = 25 °C , V<sub>R</sub> = 0 V

**Absolute Spectral Responsivity  $S_{abs}$ :**



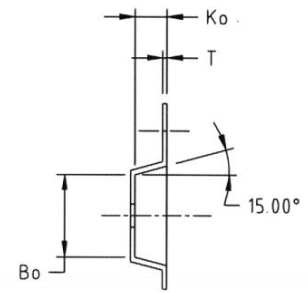
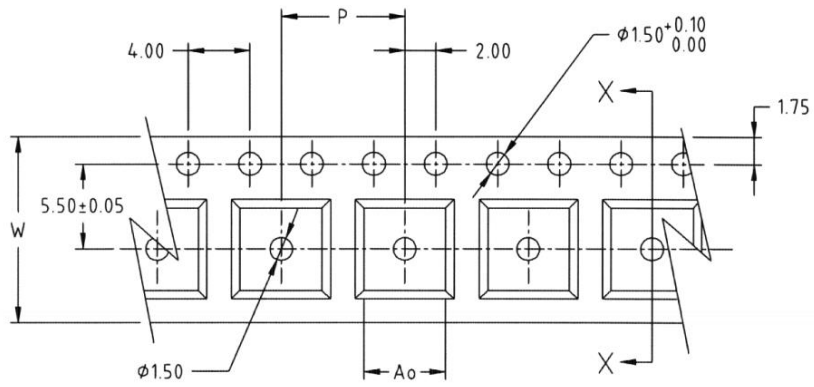
**Package Dimensions (mm):**



**Pin Connections:**

- |                             |               |
|-----------------------------|---------------|
| Pin 2:                      | Anode         |
| Pin 4,8:                    | Cathode       |
| Pin 1 (Marked), 3, 5, 6, 7: | not connected |

**Tape Information:**



**Dimensions (mm):**

<b>A<sub>0</sub>:</b>	<b>5,30 ± 0,1</b>
<b>B<sub>0</sub>:</b>	<b>5,30 ± 0,1</b>
<b>K<sub>0</sub>:</b>	<b>2,10 ± 0,1</b>
<b>P<sub>1</sub>:</b>	<b>8,00 ± 0,1</b>
<b>T:</b>	<b>0,30 ± 0,05</b>
<b>W:</b>	<b>12,00 + 0,3/ -0,1</b>