

Si - PIN - Photo diode - type FD-30

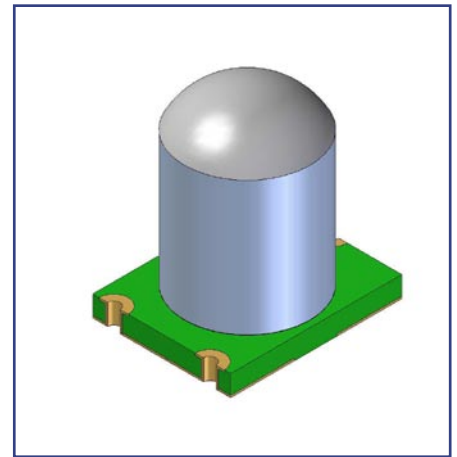


**CHARACTERISTICS**

- ▶ Increased sensitivity
- ▶ Integrated, coordinated high-efficiency optics
- ▶ No additional lenses required
- ▶ Extremely small reception and squint angles
- ▶ 3mm model, metal housing

**APPLICATION**

- ▶ For all optical sensors



micro ● SPOT®

▶ **MAXIMUM RATINGS**

Parameter	Test conditions	typ. value	Unit
Operating temperature range (T <sub>op</sub> )		-20 / + 70	°C
Reverse voltage (V <sub>R</sub> )		> 50	V

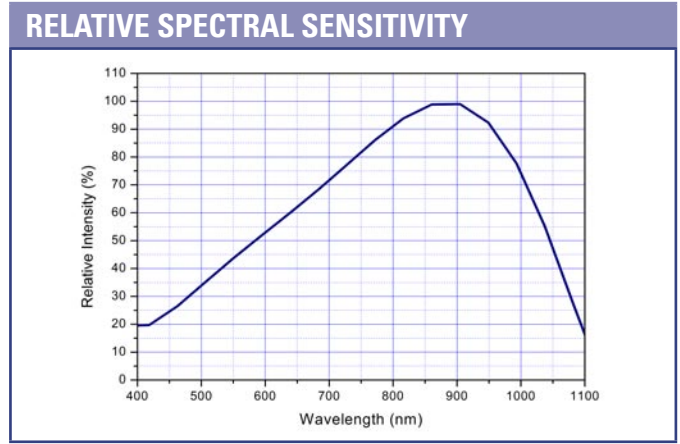
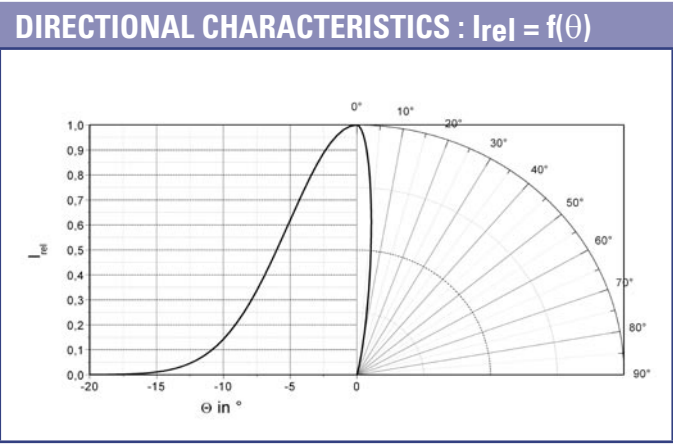
▶ **OPTICAL, MECHANICAL AND ELECTRONIC VALUES (T=25°C)**

Parameter	Test conditions	typ. value	Unit
Chip size		0,76 x 0,76	mm x mm
Chip height		0,24	mm
Dimensions of radiant sensitive area		0,55 x 0,55	mm x mm
Spectral sensitivity	650nm 875nm 940nm	0,26 0,44 0,35	A / W
Half power angle (θ)		8	deg
Dark current	V <sub>R</sub> =15V	< 4 (Typ. 0,2)	nA
Rise and fall time of the photocurrent	V <sub>R</sub> = 20 V, λ = 860nm, R = 50 Ω	10	ns
Cut-of-frequency (-3dB)	V <sub>R</sub> =20 V, λ = 860nm, R = 50 Ω	35	MHz
Noise equivalent power	V <sub>R</sub> = 0 V λ = 900nm	6 x 10 <sup>-15</sup>	$\frac{W}{\sqrt{Hz}}$
Capacitance	V <sub>R</sub> =15 V	0,6	pF

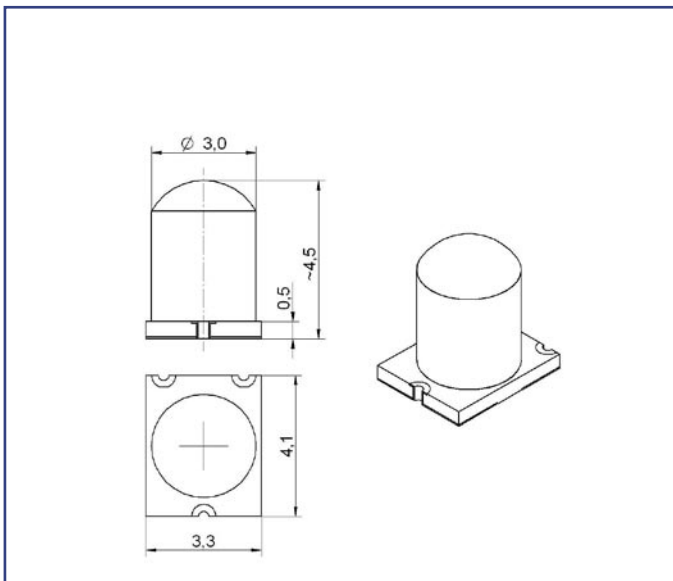


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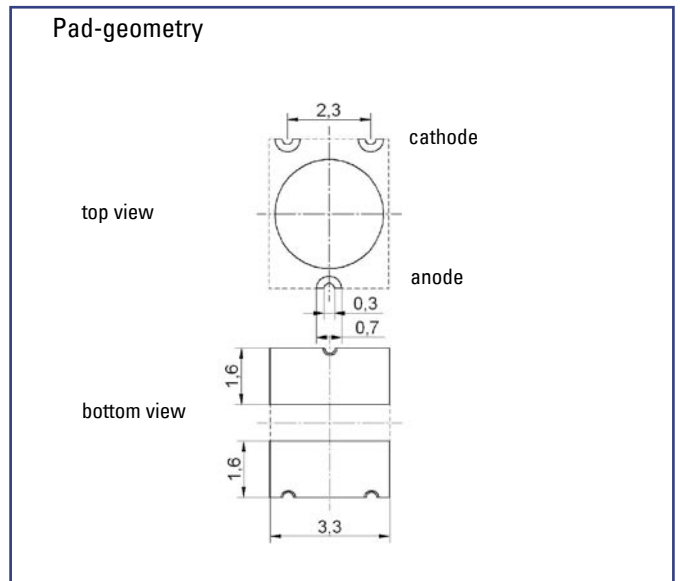
▶ **GRAPHS**



▶ **DIMENSIONS**



▶ **CONNECTOR PIN-ASSIGNMENT**



**PART DESIGNATION**

**OE-FD-30-VA1-SL21-9-0114**