

Wavelength	Type	Technology	Case
Infrared	Planar	InGaAs/InP	TO-39

	<p>Description</p> <p>InGaAs-Photodiode mounted in TO-39 standard package . High spectral sensitivity in the infrared range (NIR , SWIR) due to large active area.</p>
	<p>Applications</p> <p>Optical communications, safety equipment, light barriers</p>

Miscellaneous Parameters

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Active area		A	7,0	mm ²
Temperature coefficient		T _C (I _D)	0,074	1/K
Operating temperature range		T _{amb}	-40 to +85	°C
Storage temperature range		T _{stg}	-40 to +100	°C

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 10 mA	V _F		0,6		V
Breakdown voltage	I _R = 10 μA	V _R	5	18		V
Dark current	V _R = 5 V	I _D		5,0	30,0	nA
Responsivity at 1300 nm	V _R = 0 V	S _λ		0,9		A/W
Sensitivity range at 20%	V _R = 5 V	λ _{min} , λ _{max}	800		1700	nm
Spectral bandwidth at 50%	V _R = 5 V	Δλ _{0,5}		780		nm
Dark resistance	V _R = 10 mV	R _D	15	30		MΩ
Noise equivalent power	λ = 1300 nm	NEP		4.6x10 ⁻¹⁴		WHz ^{1/2}
Junction capacitance	V _R = 0 V	C _J		1000	1300	pF
Photo current at 1300 nm*	V _R = 0 V E _e = 1mW/cm ²	I _{Ph}		15		μA

* for information only

Note: All measurements carried out with calibrated equipment

