

Ternary PIN-Photodiode with Pigtail

- InGaAs/InP-PIN-Photodiode
- Designed for digital applications in fiber-optic communication systems
- Suitable for bit rates up to 2,5 Gbps
SONET OC-1...OC-48
SDH STM-1...STM-16
- Hermetically sealed 3-pin TO46 case
- Multimode-fiber pigtail with different connectors
- Sensitive in both opt. windows (1310 and 1550nm)
- Low junction and low package capacitance
- Fast switching times
- Low dark current, low noise
- High reverse-current stability from planar structure
- SRD00215x with flange for easy mounting



Maximum Ratings

Parameter	Symbol	Values	Unit
Forward current	I_F	10	mA
Reverse voltage	V_R	20	V
Operating and storage temperature	T_C, T_{stg}	-40...+85	°C
Max. radiant power into the opt.port @ $V_R = 5V$	P_{max}	1	mW
Soldering temperature T_{max} for 10s, 2 mm distance from bottom edge of case	T_{max}	260	°C

Characteristics

All optical data refer to a coupled 10/125µm SM fiber at ambient temperature of 25°C, if not otherwise defined.

Parameter	Symbol	Min.	Typ.	Max.	Unit
Responsivity $\lambda = 1310\text{nm}, 1550\text{ nm}, V_R = 2\text{V}$	R	0,80	0,90	1,05	A/W
Change in responsivity in operating temperature range	ΔR		0,20		%/K
Rise and fall time (10%-90%) $R_L = 50\Omega, V_R = 2\text{V}, P_{\text{opt}} = 100\mu\text{W}$	$t_r; t_f$		0,20	0,30	ns
Total capacitance $V_R = 3\text{V}, \Phi_{\text{port}} = 0, f = 1\text{MHz}$	C		0,8	1,0	pF
Dark current $V_R = 2\text{V}, T_A = 85^\circ\text{C}, \Phi_{\text{port}} = 0$	I_D			50	nA
Return Loss @ $\lambda = 1310\text{nm}$	RL			-27	dB

Ordering Information:

Type	Ordering Code	Connector/Flange
SRD00214H	Q62702-Pxxxx	Pigtail, FC/PC-connector
SRD00215H	Q62702-Pxxxx	Pigtail with flange, FC/PC-connector

Component with other connector types on request