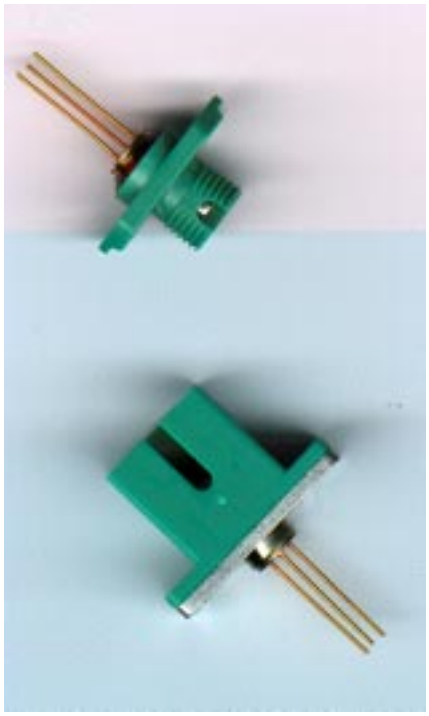
Ternary PIN-Photodiode with Receptacle

- 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
- For Singlemode- and Multimode-applications
- Receptacles for different connectors acc. to IEC-874
- 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

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 λ = 1310nm, 1550 nm, V_R = 2V	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 = 50Ω, V_R = 2V, P_{opt}= 100µW	t_r;t_f		0,20	0,30	ns
Total capacitance V_R = 3V,Φ_{port} = 0, f = 1MHz	C		0,8	1,0	pF
Dark current V_R = 2V, T_A= 85°C, Φ_{port} = 0	I_D			50	nA
Return Loss @ λ = 1310nm	RL			-20	dB

Ordering Information:

Type	**Ordering Code**	**Connector Type**
SRD00217G	Q62702-Pxxxx	FC/PC-Receptacle
SRD00217N	Q62702-Pxxxx	SC-Receptacle

Component with other connector types on request