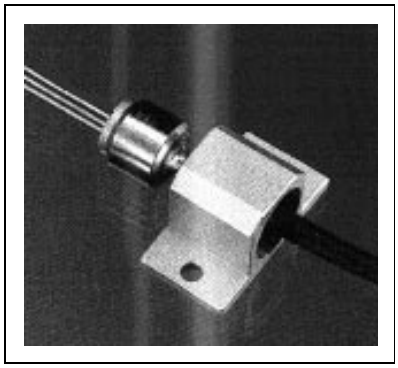
SIEMENS

Ternary PIN Photodiode
with Blocking Filter for 3rd Window

SRD 00314X
SRD 00315X

- InGaAs/InP - PIN-photodiode
- Designed for telecommunications applications
- Sensitive receiver for the 2nd optical window (1300 nm)
- Suitable for bit rates up to 1.2 Gbit/s
- Low junction and low package capacitance
- Fast switching times
- Low dark current
- Low noise
- Hermetically sealed 3-pin metal case
- Optimally coupled singlemode-fiber pigtail
- High reverse-current stability from planar structure



Type	Ordering Code	Connector/Flange
SRD 00314A	Q62702-Pxxxx	Pigtail, DIN singlemode
SRD 00315A	Q62702-P3048	Pigtail with flange, DIN singlemode
SRD 00314G	Q62702-Pxxxx	Pigtail, FC/PC-connector
SRD 00315G	Q62702-Pxxxx	Pigtail with flange, FC/PC-connector

Component with other connector types on request.

Maximum Ratings

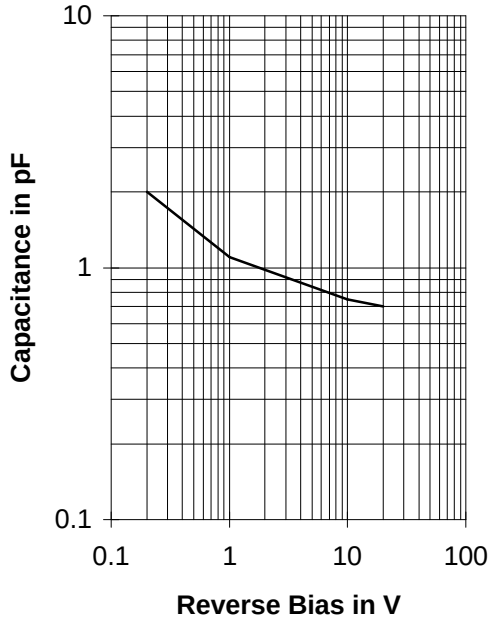
Parameter	Symbol	Values	Unit
Forward current	I_F	10	mA
Reverse voltage	V_R	20	V
Operating and storage temperature	T_A T_{stg}	– 40 … + 85	°C
Max. radiant power into the opt. port (V_R = 5 V)	Φ_{port}	1	mW
Soldering time (wave / dip soldering), distance between solder point and base plate (≥ 2 mm, 260 °C)	t_s	10	s

Characteristics

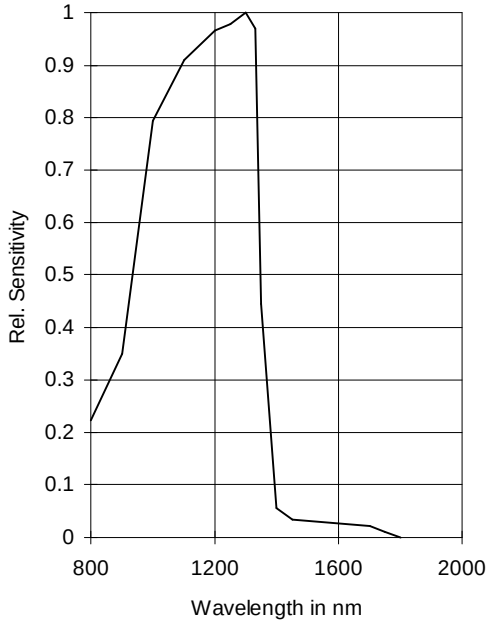
All optical data refer to a coupled 10/125 µm SM fiber at ambient temperature of 25 °C, unless otherwise defined.

Parameter	Symbol	Values	Unit
Spectral sensitivity λ = 1310 nm, V_R = 2V	S_λ	0.80 (≥ 0.70)	A/W
Change in spectral sensitivity in operating temperature range	S_λ	≤ 0.2	%/K
Rise and fall time (10% – 90%) R_L = 50 Ω, V_R = 2 V, λ = 1310 nm, Φ_{port} = 100 µW	t_r; t_f	0.3 (≤ 0.5)	ns
Total capacitance V_R = 2 V, Φ_{port} = 0, f = 1 MHz	C_2	1 (≤ 1.5)	pF
Dark current V_R = 2 V, T_A = 85 °C, Φ_{port} = 0	I_D	1 (< 50)	nA
Optical attenuation for 3rd window Cross talk	CRT	– 50	dB
Backreflection of optical power into optical port	R	≤ – 30	dB

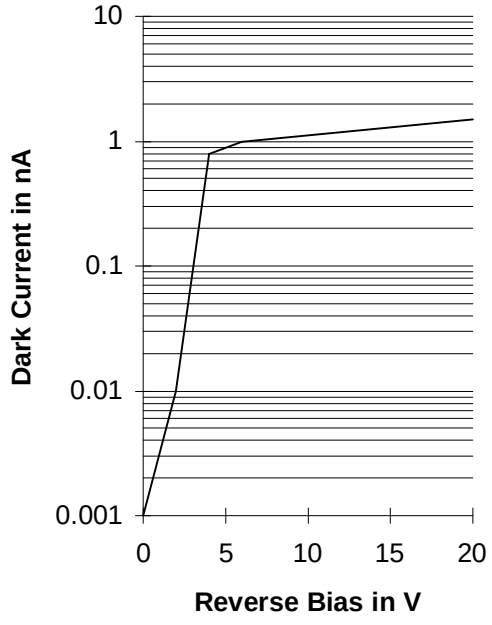
Capacitance $C = f(V_R)$
$\Phi_{port} = 0$, $f = 1$ MHz



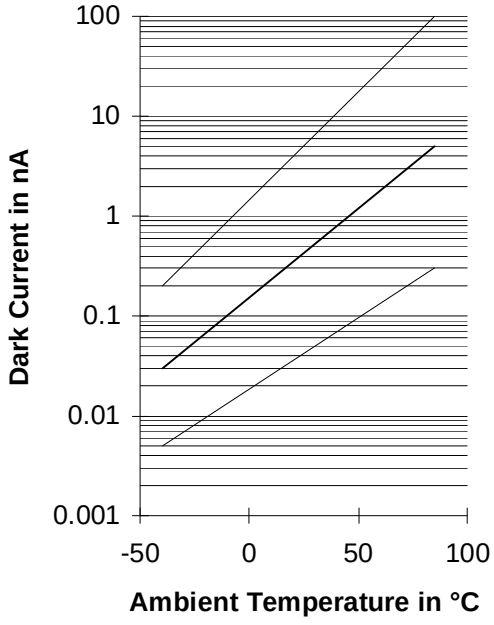
Relative Spectral Sensitivity
$V_R = 5$ V



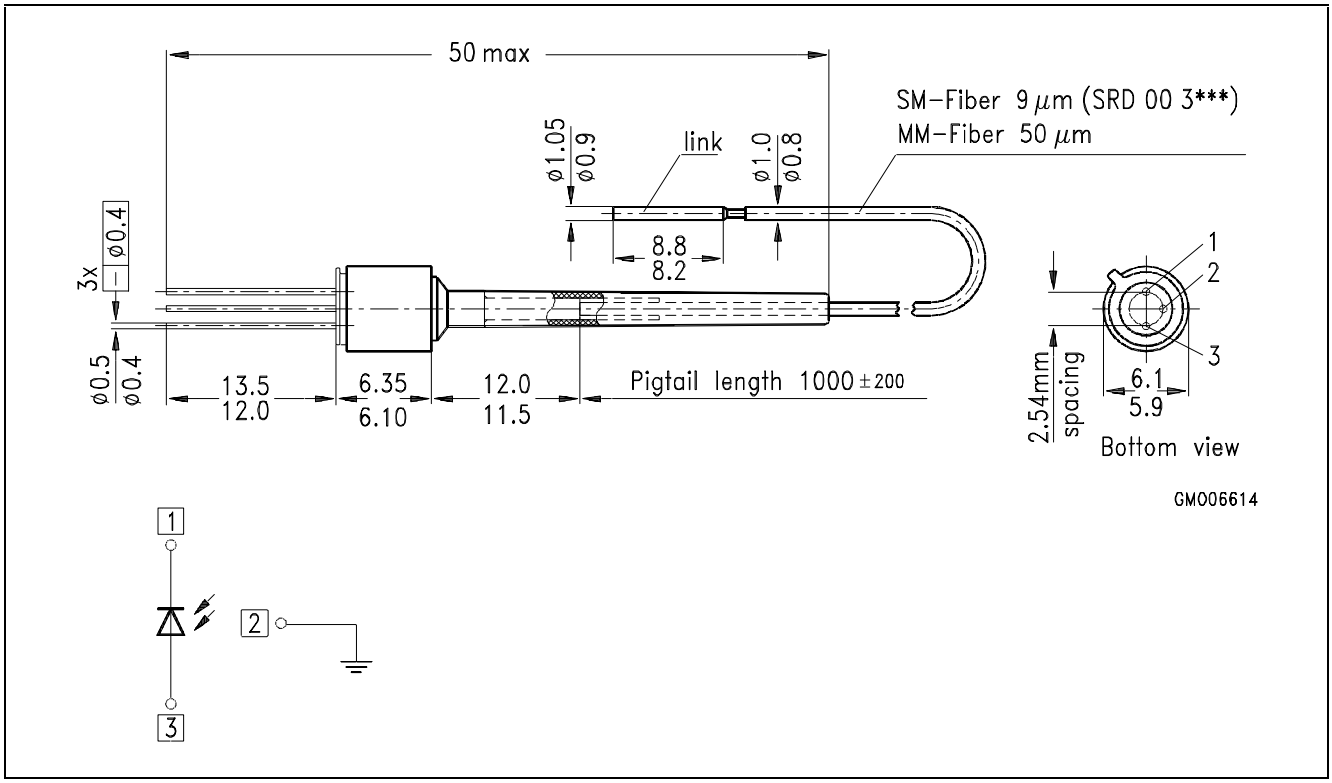
Dark Current $I_R = f(V_R)$
$I_F = f(V_F)$



Dark Current $I_R = f(T_A)$
$\Phi_{port} = 0$, $V_R = 5$ V



Package Outlines (Dimensions in mm)



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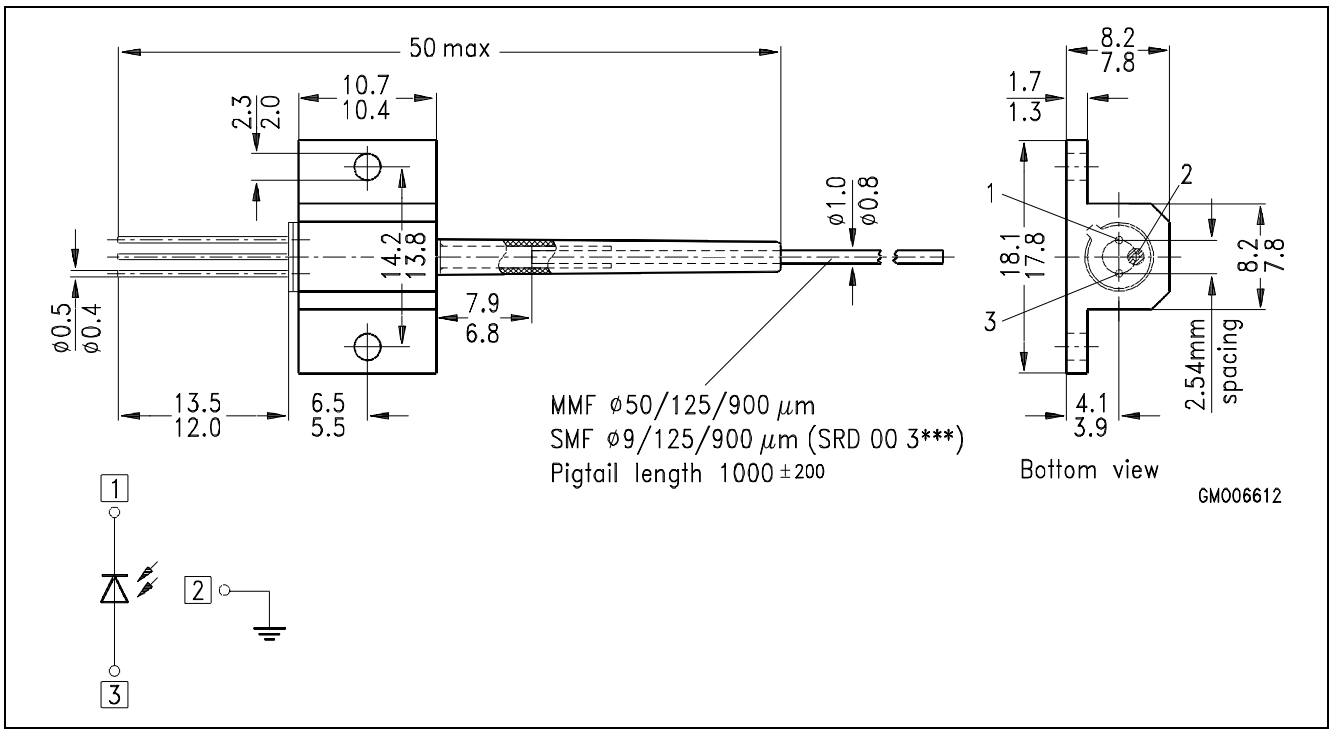

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