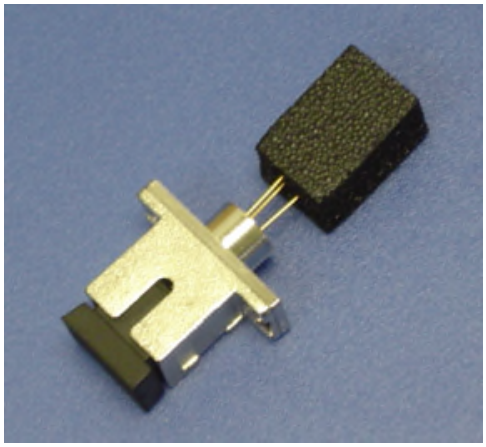
DESCRIPTION

The RPD series module incorporates a highly responsive photodiode sensitive to the communications wavelength range between 1100 nm and 1650 nm. This photodiode is hermetically packaged in an industry standard coaxial package with a metal SC housing receptacle. These modules are especially suited as a low cost detectors for digital applications up to 2.5 Gb/s, analog CATV and Satellite video reception.



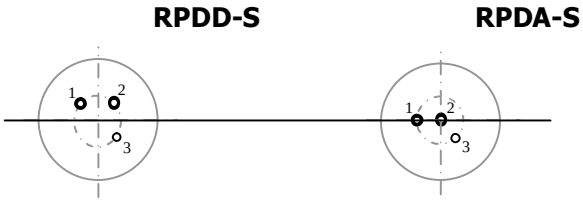
FEATURES

- High responsivity
- Low capacitance
- Wide RF bandwidth to
  - o > 2 GHz (RPDD)
  - o > 3 GHz (RPDA)
- Wide operating temperature range
- RoHS and Telcordia Compliant

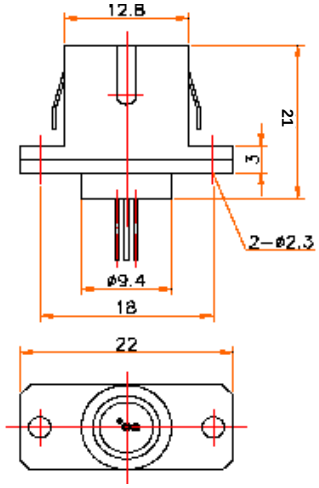
APPLICATIONS

- CATV and Telecom optical networks
- RF over Fiber

MODEL NUMBER AND MECHANICAL (mm):



	RPDD-S	RPDA-S
1	PD ANODE	PD ANODE
2	PD CATHODE	PD CATHODE
3	GND	GND



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MAXIMUM RATINGS

PARAMETER	Symbol	LIMIT
Storage Temperature	T_{ST}	-40 to +85°C
Input Power Saturation	P_{IN}	10 mW
Reverse Voltage	V_R	25 V
Forward Current	I_F	10 mA
Soldering Temperature		260°C, 10 sec.

ELECTRO-OPTICAL CHARACTERISTICS (T=25 °C unless otherwise specified)

PARAMETER	SYMBOL	MIN	TYPICAL	MAX	UNIT
Operating Temperature	T_{OP}	-40		+85	°C
Optical Wavelength Range		1100	--	1650	nm
Responsivity @1310 nm Responsivity @1550 nm	R	0.85 0.90	0.88 0.95	--	A/W
Optical Return Loss @1310 nm Optical Return Loss @1550 nm	ORL	--	--	-40 -30	dB
Bandwidth (RPDD) Bandwidth (RPDA)	BW	2 3	-		GHz
Second Order Intermodulation	IMD2	See Note (1) Below	-75	-70	dB
Third Order Intermodulation	IMD3		-85	-80	dB
Dark Current	I_D	--	--	1	nA
Operating Voltage	V_{OP}		-5	-15	V
Capacitance (RPDD) Capacitance (RPDA)	C	--	--	0.70 0.60	pF

Note (1): 2-tone measurement at 1310 nm, V_{OP} = -5V, OMI=40%, 0 dBm received power

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