



DESCRIPTION

The PPDA series module incorporates a highly linear photodiode sensitive to the wavelength range between 1100 nm and 1650 nm. This module is a hermetically sealed coaxial package with a single mode fiber pigtail.

FEATURES

- High linearity, low capacitance photodiode
- Low back reflection in package
- Wide RF bandwidth up to 3 GHz
- Wide operating temperature range
- RoHS compliant

APPLICATIONS

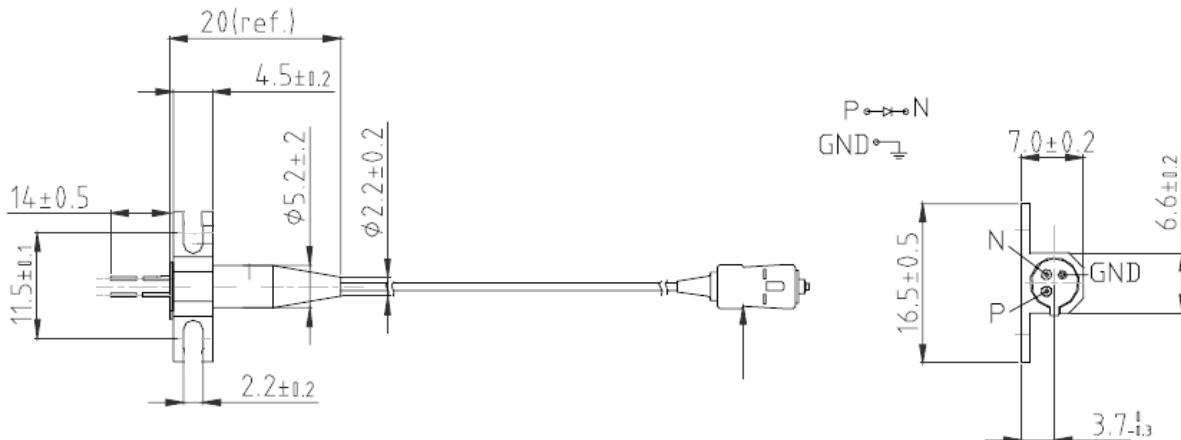
- CATV node receivers
- Forward and return path
- Analog/digital QAM
- Higher channel satellite signal transmission
- FTTC/FTTH, PON networks

MODEL OPTIONS

PPDA - S	:	S = SC/APC
PPDA - F	:	F = FC/APC

MECHANICAL SPECIFICATIONS with Optional Mounting Bracket

(mm unless otherwise noticed, orientation of leads in bracket arbitrary)



- Fiber is SMF-28, flame retardant Hytrel coating, 0.9 mm diameter, 1 m long
- Customized length and mounting bracket are available upon request.

ELECTRO-OPTICAL CHARACTERISTICS					
PARAMETERS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Operating temperature	T_{op}	-40	-	85	°C
Optical wavelength range	λ_{op}	1100	-	1650	nm
Responsivity	r	-	0.85 @ 1310nm 0.95 @ 1550nm	-	A/W
Bandwidth	BW	-	-	3	GHz
RF Flatness	$FR \leq 1$ $FR \leq 3$	-0.5 -1.5	-	0.5 1.5	GHz
Dark current	I_D	-	-	1	nA
Optical Return Loss	ORL	-	-45	-	dB
2 nd Order Intermodulation	IMD2	Note(1)	-	-75	dB
3 rd Order Intermodulation	IMD3		-	-85	
Capacitance	C	-	-	0.6	pF

⁽¹⁾ 2-tone measurement at 1310 nm, OMI=40%, 0 dBm received power, measured at 450 MHz, 600 MHz, 850 MHz, and 1 GHz

MAXIMUM RATINGS					
PARAMETERS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Storage Temperature	T	-40	-	85	°C
Input power saturation	P_o	-	-	10	mW
Reverse voltage	V_R	-	-	35	V
Forward current	I_F	-	-	10	mA

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS

