

**1300 / 1550
nm**

PD-155*-ip

Description:

PD-155*-ip – is a series of receiver optical modules for spectral range of 1300/1550nm based on InGaAs/InP PIN photodiode and coupled with singlemode (PD-155s-ip) or multimode (PD-155m-ip) optical fiber. Hermetically sealed modules are performed in standard package and integrated with low noise transimpedance amplifier, built-in AGC system and differential output. The modules operate in wide temperature range, have broad dynamic range and low noise level.

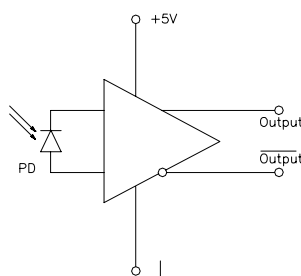
PD-155*-ip – are the best receivers for digital fiber-optic communication lines with up to 155 Mbps of data rate.



Optical and electrical characteristics (T=25°C):

Characteristics	Symbol	Test condition	Min	Typ.	Max	Units
Optical parameters						
Spectral range of maximum responsivity	λ_{OP}		1100	1310	1650	nm
Bandwidth	BW	$P_i=1.0 \mu W$		125		MHz
Maximum detected power	P_{SAT}	155 Mbps @ 1310 nm		0		dBm
Sensitivity at 10^{-9} of bit error rate	Sens	155 Mbps @ 1310 nm	-35	-36		dBm
		34 Mbps @ 1310 nm	-40			
		2÷8 Mbps @ 1310 nm	-41			
Fiber core/cladding diameter	D_C/D_{CL}	PD-155s-ip		9/125		μm
		PD-155m-ip		50/125		
Optical connector type				«FC»		
Electrical parameters						
Supply voltage	U_P		4.5	5.0	5.5	V
Output voltage (DC)	U_{ODC}		1.5	2.5	3.5	V
Differential output voltage	U_D				1.2	V
Rise time/fall time	τ_R/τ_F			3.0	4.5	ns
Supply current	I_P				35	mA
Impedance	R_{OUT}			50		Ω
Environment						
Operating temperature range	T_{OP}		-20		+55	°C
Storage temperature range	T_{ST}		-40		+70	°C
Pin soldering temperature					200	°C
Pin soldering time					3.0	sec

Outline diagram:



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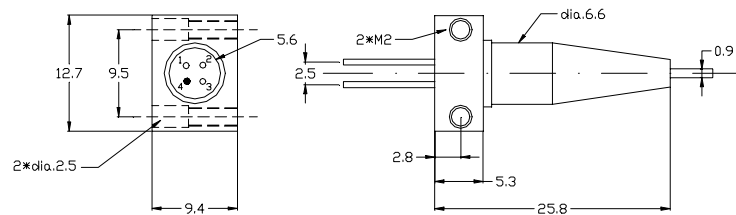
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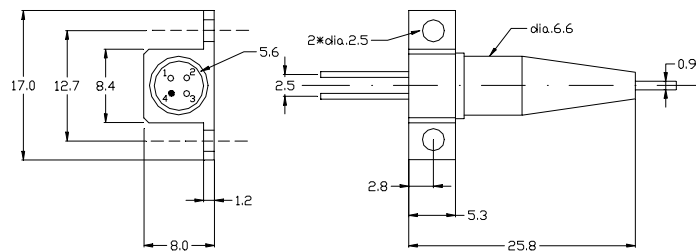
Package specifications (type «A»):

Pin	Function
1	“+” voltage supply
2	inverted data output
3	data output
4	case, ground



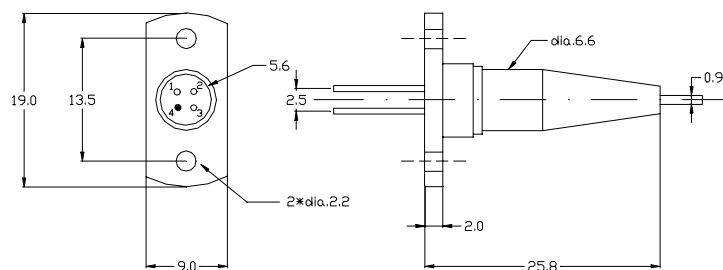
Package specifications (type «B»):

Pin	Function
1	“+” voltage supply
2	inverted data output
3	data output
4	case, ground



Package specifications (type «C»):

Pin	Function
1	“+” voltage supply
2	inverted data output
3	data output
4	case, ground



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