



Features

- 1310nm DFB Laser Design, 1550nm Analog Receiver
- High Isolation
- 1GHz video Receiver Bandwidth
- RoHS Compliant available

Application

- Design for fiber optic networks

Absolute Maximum Ratings

Parameter	Min	Typical	Max	Unit
Operating Temperature (case)	0	-	70	°C
Storage Temperature	-40	-	100	°C
LD Reverse Voltage	-	-	2	V

Transmitter Characteristics (Note 1)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Wavelength at 25°C	λ	1290	-	1330	nm
Side Mode Suppression Ratio	SMSR	30	35	-	dB
Spectral Width (-20dB)	$\Delta \lambda$	-	-	1	nm
Output Power at 25°C, I _{th} +20mA	P _o	2	-	-	mW
Bias Current at P _o	I _{bias}	-	-	75	mA
Threshold Current	I _{th}	-	-	40	mA
Monitor Current at P _o	I _{pd}	100	-	-	μ A
Tracking Error	TE	-2	-	2	dB
Forward Voltage	V _F	-	1.2	1.6	V
Rise/Fall Time	T _r /T _f	-	-	0.3	ns
Monitor Dark Current	I _{dk}	-	-	0.1	μ A
Monitor Diode Capacitance	C _{pd}	-	6	15	pF
Slope Efficiency at 25°C	SE	0.1	-	-	mW/mA
Optical Crosstalk	CRT	-	-	-40	dB

(Note 1) All data are specified across the operating temperature range 0~70°C.

Analog Receiver Characteristics (Note 1)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Detection Wavelength	λ	1550	-	1560	nm
Responsivity	R	0.85	-	-	mA/mW
Bandwidth (a)	BW	1000	-	-	MHz
Dark Current at $V_r=5V$	I_d	-	2	5	nA
Capacitance at $V_r=5V$ and 1MHz	C	-	0.6	0.8	pF
Optical Return Loss @1550nm	ORL	30	40	-	dB
Polarization Dependent Loss	PDL	-	-	0.5	dB
DSO		-	-75	-70	dBc
DTB		-	-80	-75	dBc

(Note 1) All data are specified across the operating temperature range 0~70°C.

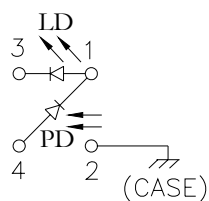
(a) 0.5dB measurement.

Pin Assignment

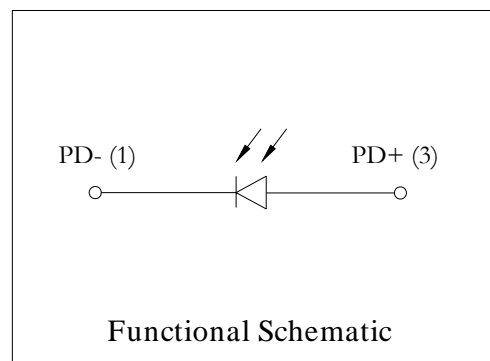
LD Pin Assignment

D Type

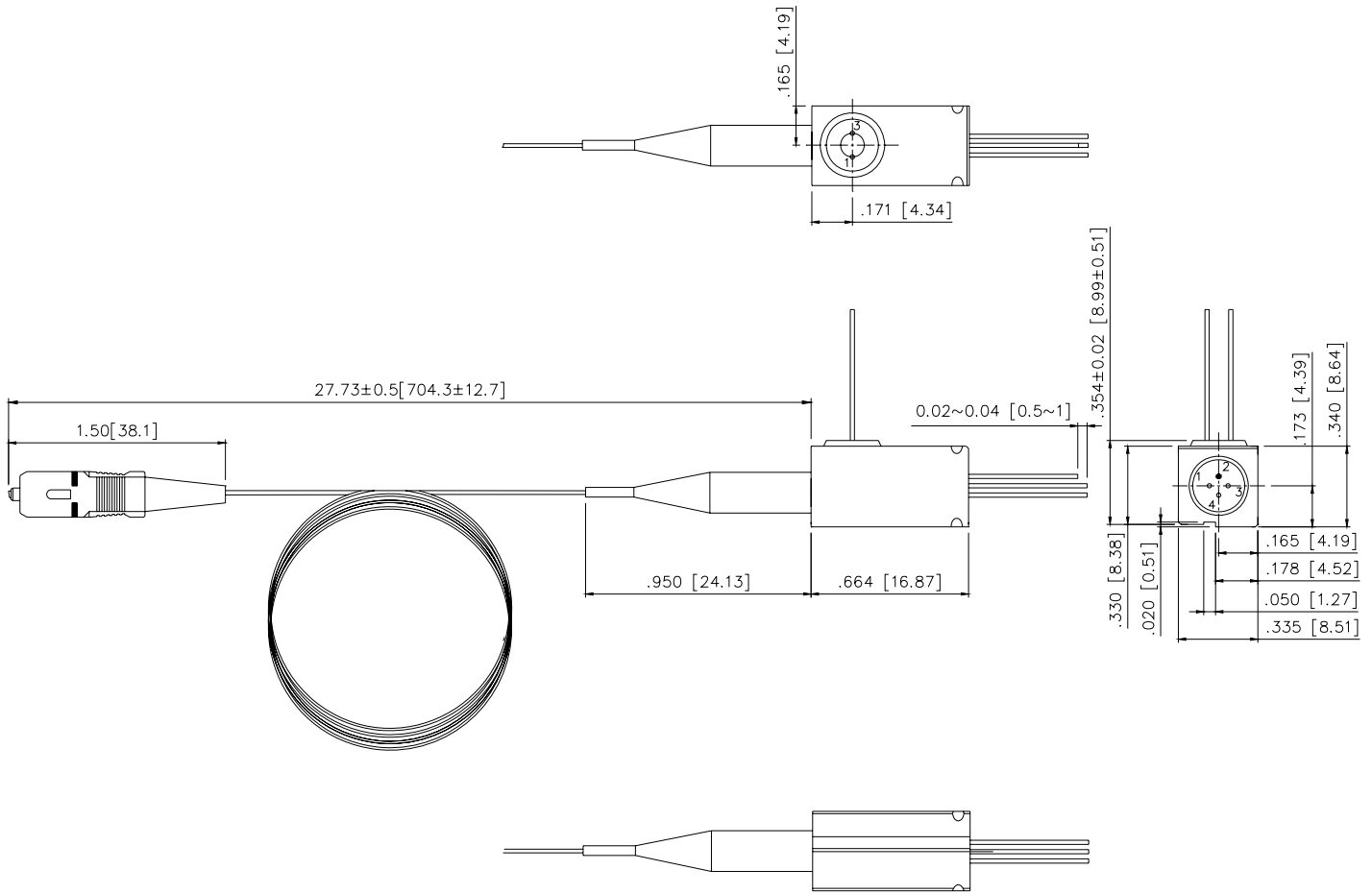
- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode



PD Pin Assignment

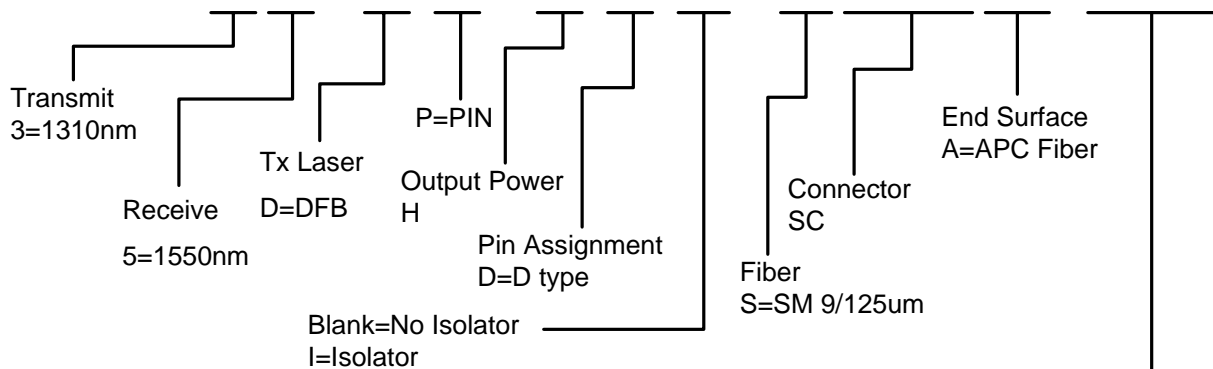


Mechanic Dimension units: inch[mm]



Ordering Information

ODP-35-DP-HDX-SSCA-XX



RoHS Compliant
 Blank / G5 / GR
 Blank = RoHS non-compliant product
 G5 = RoHS 5/6-compliant product (lead exemption)
 GR = Full RoHS Compliant product (no exemption)

Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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