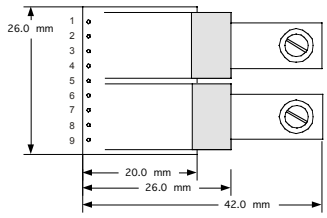
Fast Ethernet POF 1x9 Transceiver Module

Datasheet: 2.2POF650HPS3.3

Description:
The transceiver module comprises a standard 1x9 electrical interface suitable for many Fast Ethernet network components like media converters, switches or PCI-cards. Standard POF (NA = 0.5) duplex cable is plugged in without cable connector. All POF cables with a cable outside diameter of 2.2mm fit to the adapter.
The transceiver module requires a 3.3V power supply. The receiver unit comprises a novel high pass receiver electronics that compensates the high dispersion of standard POF. The use of low NA POF (NA = 0.3) is possible, too. The transmitter center wavelength at room temperature is 647nm. It shifts to the POF attenuation minimum at 650nm with elevated temperatures.



Pinout:

1 = Gnd	6 = TX Vcc
2 = Data Out	7 = !Data In!
3 = !Data Out!	8 = Data In
4 = Signal-Detect	9 = Gnd
5 = RX Vcc	

Applications:
The transceiver module is applied in Fast Ethernet over POF systems applications like:

- Industrial communication systems
- LAN-networks
- Inhouse networks

Technical Data:

typ. Average output power	typ.center wavelent	datarate	typ. Link distance	typ. receiver sensitivity	system application	input optical power maximum
-0,3dBm	645nm	125Mbit/s	1…75m	-20dBm	100BaseFX	0dBm

power supply voltage	supply current TX (pin 6)	supply current RX (pin 5)	diff. data input (pins 2+3)	diff. data output (pins 7+8)	operating temperature
3.3V ± 5%	120mA	65mA	LVPECL	LVPECL	-20...70°C

Notes:
- Power supply lines require external filter components.
- Typical values are typical data @ 25°C with standard POF, usually also available over operating temperature range.
- Differential data input and differential data output (LVPECL) require external components for line termination and level adjustment.
- Signal-detect output level (PECL) is generated inside the module.
- Receiver sensitivity depends on signal quality with respect to dispersion and signal optical power. The given sensitivity applies for a signal attenuated and dispersed by full length POF only.
- For additional information on required external components, e.g. custom POF-connectors or other feasible modifications please contact DieMount GmbH.

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