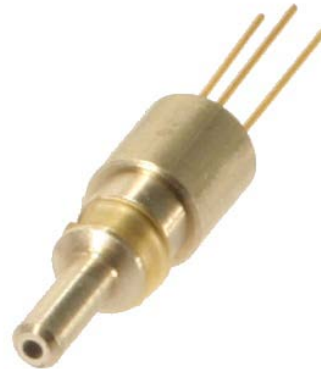


**Si PIN Photodiode 320...1060nm 100MHz**

**1 General**

This high speed Si PIN photodiode is designed for visible to near infrared light detection. The photodiode provides wideband characteristics at low bias, making it suitable for optical communications and other photometry. The insert includes a 1mm POF fiber stub for efficient fiber coupling. The insert meet the requirements of DIN 41626 and are designed for use in mixed card edge connectors, type DIN 41612 or D-Sub.



Pic. 1 Fiber optic receiver

**2 Applications**

Due to the high speed, the good optical and mechanical features, this receiver may be used in many applications:

- Optical networks
- Industrial electronic
- Power electronic

**5 Features**

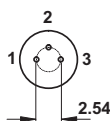
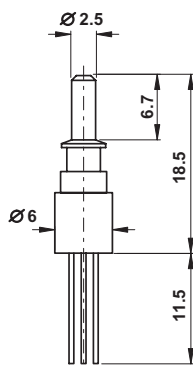
- 320...1060nm optical receiver
- High sensitivity
- 100MHz bandwidth
- High reliability
- 2.5mm metal ferrule
- Qualified for 1mm POF, PCF
- Wave soldering compatible

**3 Ordering Information**

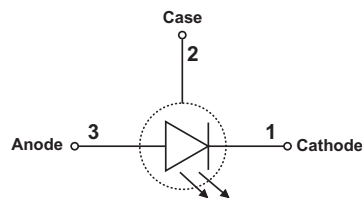
Style	Part Number
DIN 41626 Male Insert	905EMPINDI104

**4 Technical Drawing**

Case



Schematic



Pinout

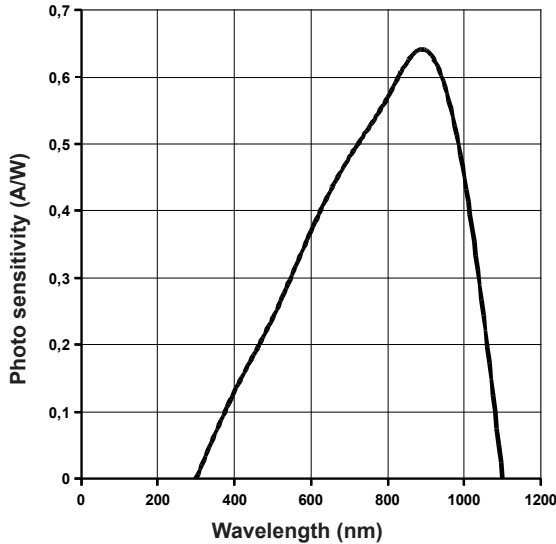
PIN Nr.	Funktion
1	Cathode
2	Case
3	Anode

Pic 2 Case drawing

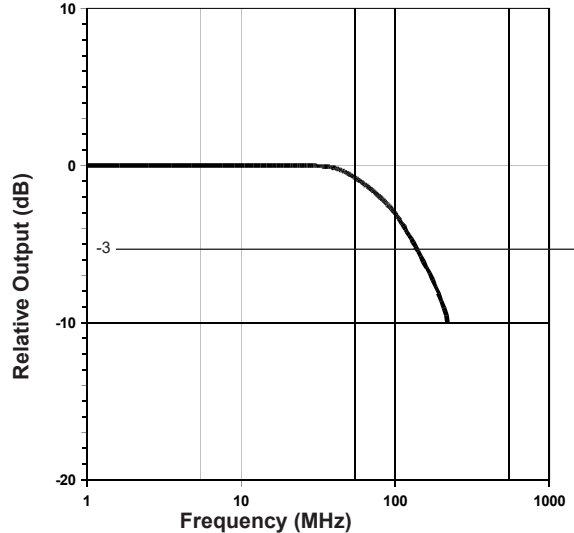


## Si PIN Photodiode 320...1060nm 100MHz

### 6 Spectral response \_\_\_\_\_



### 7 Frequency response \_\_\_\_\_



### 8 Maximum ratings \_\_\_\_\_

Stresses beyond those listed under 'Maximum Ratings' may cause permanent damage to the device. Listed values are stress limits only and functional operation of the device at these conditions is not recommended. Exposure to maximum rating conditions for extended periods may affect the device reliability.

Parameter	Symbol	Value	Unit
Reverse voltage	$V_R$	20	V
Power dissipation	P	50	mW
Operating temperature	$T_{opr}$	-40 to +85	°C
Storage temperature	$T_{stg}$	-55 to +85	°C

### 9 Technical data \_\_\_\_\_

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Spectral range	$\lambda$		320		1060	nm
Peak sensitivity	$\lambda_{PEAK}$		-	900	-	nm
660nm sensitivity	$S_{660}$		-	0.44	-	A/W
Dark current	$I_D$	$V_R = 10V$	-	0.07	1	nA
Cut-off frequency	$f_C$	$V_R = 10V$	-	100	-	MHz
Capacitance	$C_t$	$V_R = 10V$ $f = 1MHz$	-	3	-	pF
Noise equivalent power	NEP	$V_R = 10V$	-	$7.4 \times 10^{-15}$	-	W/Hz <sup>1/2</sup>

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