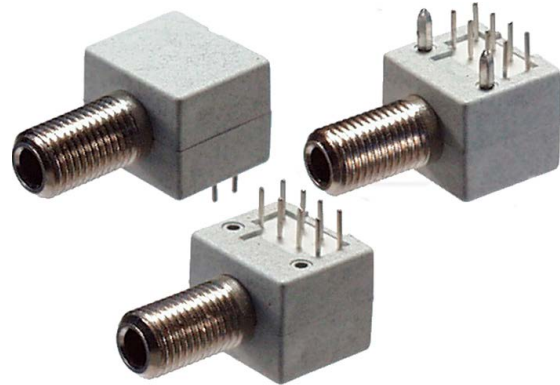


**Data Sheet F-SMA DIP Receptacle
 660nm Transmitter**

LED 660nm

1 General

This device is designed for applications with 1mm plastic optical fiber (POF). The high performance of the LED makes this transmitter a good choice in data transmission systems with plastic fibers.



Pic. 1 DIP receptacle

2 Application

Due to the good optical and mechanical features this transmitter may be used in many applications:

- Optical networks
- Industrial electronic
- Power electronic
- Light barrier

4 Features

- 660nm LED
- F-SMA metal port
- qualified for POF and PCF-fiber
- plastic housing
- optional with fixing pins
- pick and place support
- wave soldering compatible

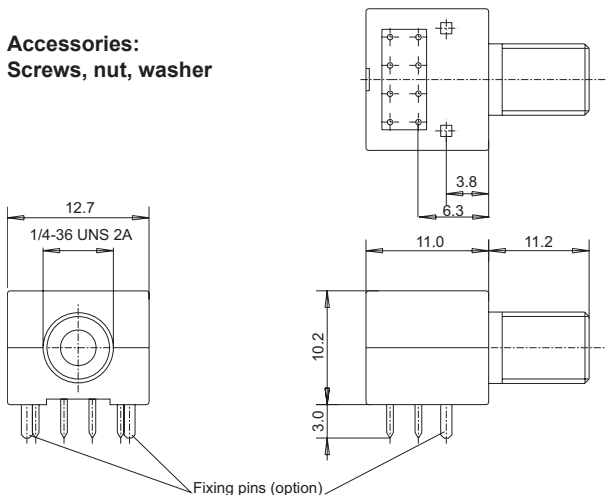
3 Ordering information

Type	Part number
660nm Transmitter	905SE660SM006
660nm Transmitter (with fixing pins)	905SE660SM007

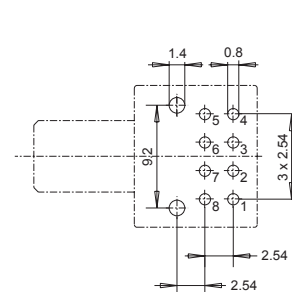
5 Technical drawing

Housing

Accessories:
 Screws, nut, washer

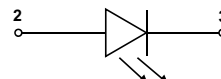


PCB drill drawing



Top view
 Drill diameter:
 Pin 1..8 = 0.8mm
 Fixing pins (option) = 1.4mm

Schematic diagramm



Pin-No.	Function
2	Anode
3	Cathode
1, 4, 5, 6, 7, 8	NC

LED 660nm

6 Maximum Ratings ($T_C = 25^\circ\text{C}$) _____

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	Value	Unit
Operating temperature	-20 ... +80	$^\circ\text{C}$
Storage temperature	-30 ... +100	$^\circ\text{C}$
Junction temperature	100	$^\circ\text{C}$
Lead soldering temperature 3mm from case, $t \leq 5\text{s}$	260	$^\circ\text{C}$
Reverse voltage	5	V
Forward current	50	mA
Forward pulse current $t_w \leq 10\mu\text{s}$, $T = \text{ms}$	500	mA
Power dissipation	120	mW

7 Technical Data _____

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$		1.8	2.2	V
Power output	P_O	$I_F = 20\text{mA}$		5		mW
Reverse current	I_R	$V_R = 5\text{V}$			100	μA
Peak wavelength	λ_p	$I_F = 20\text{mA}$		660		nm
Spectral line half width	Δ_λ	$I_F = 20\text{mA}$		25		
Half intensity beam angle	$\theta_{1/2}$	$I_F = 20\text{mA}$		± 55		deg.
Switching times	t_r	$I_{FP} = 20\text{mA}$		30		ns
	t_f			30		
Junction capacitance	C_J	1MHz, $V=0\text{V}$		20		pF
Temperature coefficient	T_{POPT}	$I_F = 10\text{mA}$		-0.5		$\%/^\circ\text{C}$
	T_{VF}			-1.5		$\text{mV}/^\circ\text{C}$

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