Ratioplast
Electronics | OptoElectronics

Data Sheet **Metal Receptacle 660 nm Transmitter**

LED 660 nm

1. General Description

The Transmitter is especially appropriate for plastic fiber optic applications up to 1 mm fiber diameter. The high performance of the 660 nm LED makes this transmitter a good choice in data transmission systems with plastic fibers.

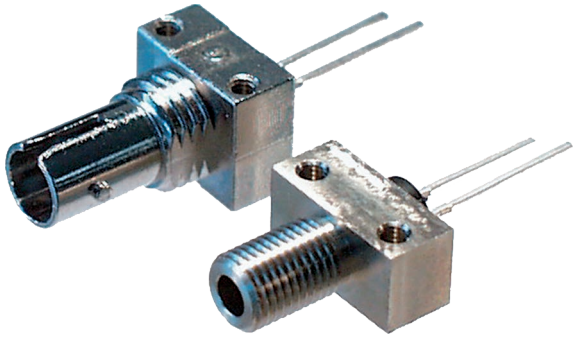
2. Application

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

- Optical Networks
- Industrial Electronics
- Power Electronics
- Light Barriers

3. Ordering Information

Model:	***Order Number:***
F-SMA	905SE660SM106
F-SMA with accessories	905SE660SM1Z6
F-ST	905SE660ST106
F-ST with accessories	905SE660ST1Z6



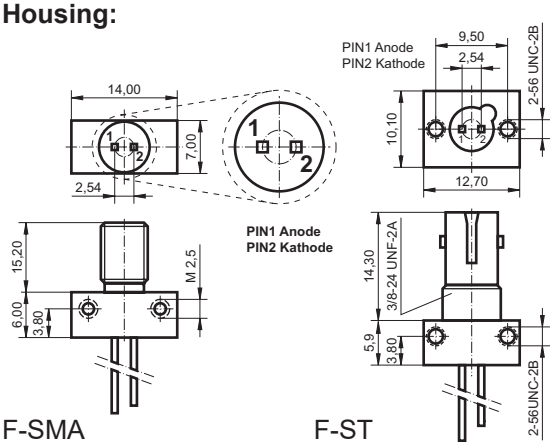
Pic 1 *F-ST, F-SMA Metall Receptacle*

4. Features

- 660 nm LED
- F-SMA metal port
- F-ST metal port
- Qualified for plastic and PCF fiber
- Metal housing
- Wave soldering compatible

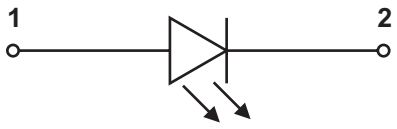
5. Drawings

Housing:



Pic 2 *Drawings F-ST, F-SMA Metall Receptacle*

Circuit:



Accessories: Attachment nut, lock washer, screws for PCB-mounting

LED 660 nm

6 Maximum Ratings (T_C = 25°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	°C
Storage temperature	-30 ... +100	°C
Junction temperature	100	°C
Lead soldering temperature 3mm from case, t ≤ 5s	260	°C
Reverse voltage	5	V
Forward current	50	mA
Forward pulse current t_w ≤ 10µs, T=ms	500	mA
Power dissipation	120	mW

7 Technical Data

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

The information released by Ratioplast-Optoelectronics GmbH in this data sheet is believed to be accurate and reliable. However, no responsibility is assumed by Ratioplast-Optoelectronics GmbH for its use. Ratioplast-Optoelectronics GmbH reserves the right to change circuitry and specifications at any time without notification to the customer.

Company address:
Jockweg 64
D 32312 Lübbecke
Phone +49 (0) 5741 23 66 5-0
Fax +49 (0) 5741 23 66 5-44
Internet: http://www.ratioplast.de
E-Mail: opto@ratioplast.de
VAT Reg. No.: DE 164 216 351
Local Court Bad Oeynhausen HRB 2382