



2 GHz - 6 GHz OPTICAL TRANSMIT LINK

FEATURES

- ◆ Bandwidth 2GHz-6GHz
- ◆ Simple power supply
- ◆ No relay, far transmission distance
- ◆ Small size/light-weight/strong capability of anti-electromagnetism

APPLICATIONS

- ◆ Analog signal communication
- ◆ Test/Control
- ◆ Local oscillator remoting
- ◆ Signal remoting



KEY TECHNICAL PARAMETERS

ELECTRICAL SPECIFICATIONS					
PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
Operating frequency*	3dB bandwidth	MHz	2000		6000
Gain **		dB	-30	-25	0
Gain flatness		dB			±1.5
Noise figure **		dB		36	38
Group delay	Peak-to-peak (≥500MHz)	ns		0.1	0.2
VSWR	TX RF _{in} /RX RF _{out}				2:1
Phase noise	10KHz offset	dBc		110	
Input power at 1dB compression		dBm		15	
Spurious-free dynamic range	At 6 GHz bandwidth	dB/Hz ^{2/3}	-	105	
Maximum input power	No damage	dBm			20
RF connector ***	SMA female (male optional)				
Impedance	TX RF _{in} /RX RF _{out}	Ohms		50	
NOTE: -10dBm input power, 1m of fiber,*Optional 500 MHz start frequency,**At 6 GHz.					
*** “K”/“V” style optional.					



OPTICAL PERFORMANCE SPECIFICATIONS					
PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
Fiber optic connectors	FC/APC (other connector types optional)				
Fiber	Signal mode fiber (9/125um)				
Spectral width	FWHM	nm		0.1	
Optical power in fiber		mW	3	6	10
Emission wavelength		nm		1550	
acceptable input optical power	Reference only	mW		6	10
Acceptable optical wavelength		nm	1200		1650
NOTE:					

POWER REQUIREMENTS					
PARAMETERS	CURRENT/ROOM TEMPERATURE 25 °	PIN	MIN.	TYP.	MAX.
Transmitter*	VCC: 100mA, 800mA (MAX)	VCC	4.7	5	5.2
	VDD: 100mA, 230mA (MAX)	VDD	-5.2	-5	-4.7
Receiver	230mA	VCC	11	12	13
NOTE:*At different temperature, the operating current of transmitter(VCC,VDD) would change					

BLOCK DIAGRAM

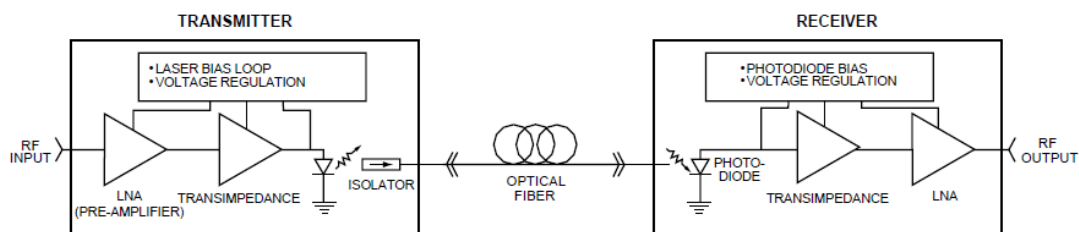


Figure 1—Block diagram



SIZE AND STRUCTURE

Transmitter size and structure please see figure 2a, receiver size and structure see figure 2b.

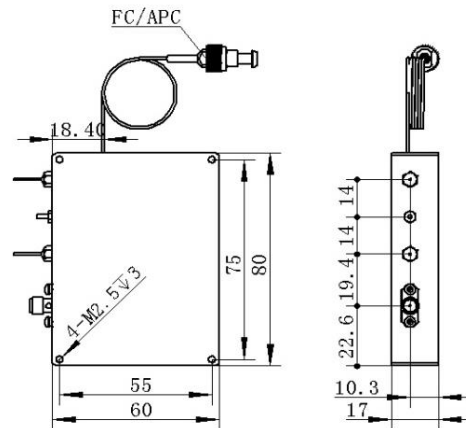


Figure 2a-- Transmitter size and structure diagram

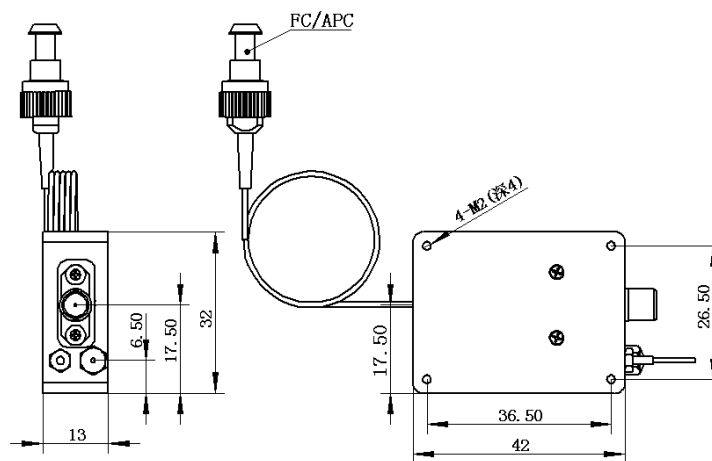


Figure 2b-- Receiver size and structure diagram

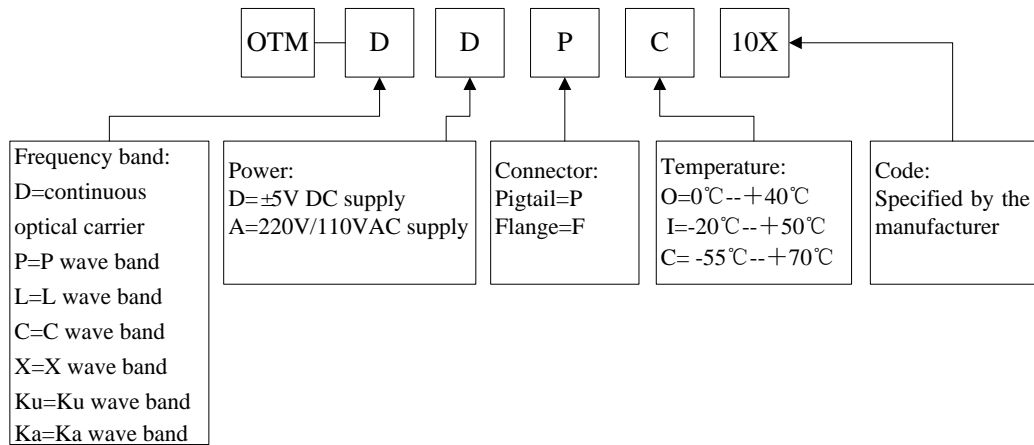


ENVIRONMENTAL CONDITIONS

Quality level Environmental	Commercial(O)	Industrial(I)	Custom(C)
Operating temperature	0°C ~ +40°C	-20°C ~ +50°C	-55°C ~ +70°C
Storage temperature	0°C ~ +50°C	-40°C ~ +70°C	-55°C ~ +85°C
Relative humidity	\	95%	95%
Vibration	\	\	RMS meet different requirements
NOTE	If you have special requirements please contact manufacturer		

ORDERING INFORMATION

Optical Transmitter Module:



Optical Receiver Module:

