



# **FIBER OPTIC SOLUTION**

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3. LD(Optic Laser Diode)
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# Multi Wave Fiber Optic Transceiver

## SUMMARY OF FEATURES

- Broadband Operation
- Low Noise & Low Back Reflection
- 1310, 1550, 1530, 1510, 1570nm Wave Length
- WDM Inside
- FSK Modem



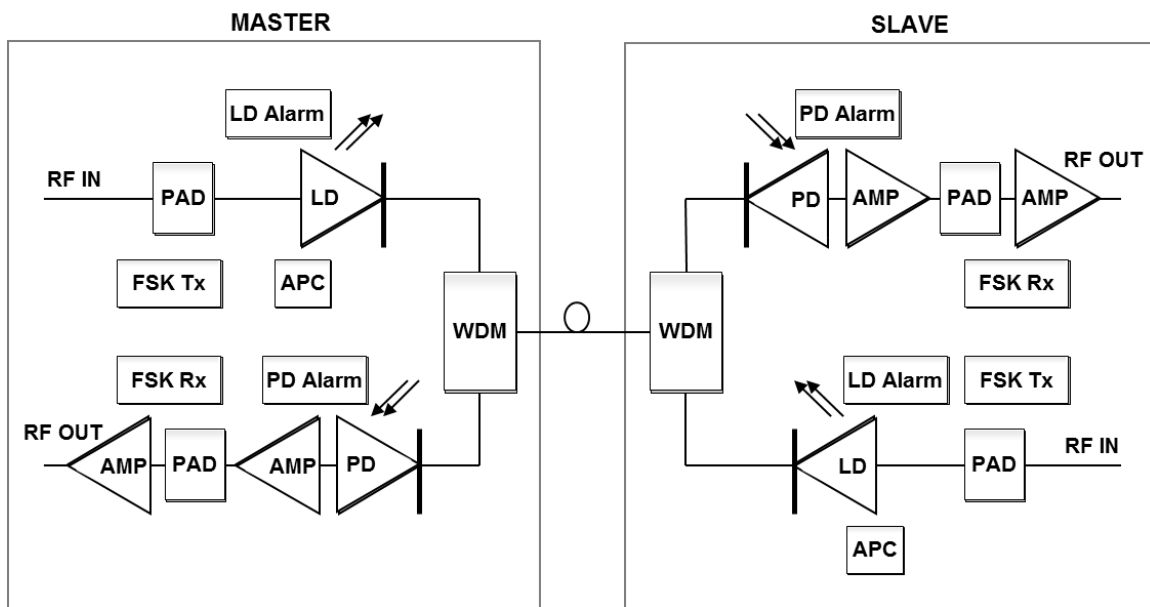
## SPECIFICATION

Parameter		Unit	Item			Remarks
			Min.	Typ.	Max.	
Optical Output Power	Master	dBm	2	-	7	Master
	Slave					Slave
Wave Length	Master	nm	1300	1310	1320	WDM Inside/ Number of Wave can be Customized
	Slave1		1500	1510	1520	
	Slave2		1520	1530	1540	
	Slave3		1540	1550	1560	
	Slave4		1560	1570	1580	
RF GAIN	TX(380M~2200M)	dB	-3.5	0	+3.5	Frequency can be Customized
	RX(380M~2200M)					
Flatness	Forward	dB(p-p)	-	-	4	-
	Reverse					
VSWR	Forward	S11	1.5 : 1			-
	Reverse	S22				
IP3 (0dBm/Tone)	Forward	dBm	25	-	-	-
	Reverse					
Output Noise Floor	Forward	dBm/Hz	-	-	-130	-
	Reverse					
Isolation	Master	dBc	50	60	-	-
	Slave					
Alarm	LD	dBm	-	-3	-	Normal High
	PD	dBm	-	-15	-	
Current	Master	mA	-	-	700	12VDC
	Slave					
FSK Modem	Forward Frequency	MHz		26		Optional
	Reverse Frequency	MHz		29		
	Data Rate	bps		9600		
Connector		FC/APC, 9Pin D-sub, SMA(f)				

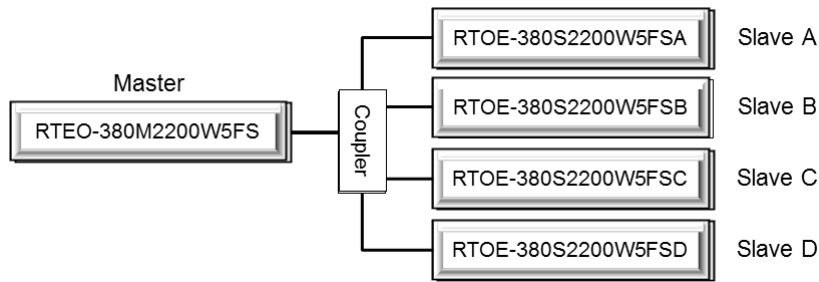
**INTERFACE DESCRIPTION (9PIN D-SUB)**

Pin Number	Specification		Remark
	Master	Slave	
1	Enable Modem	Enable Modem	Enable: Low Disable: +5V or NC
2	GND	GND	
3	+12V	+12V	
4	TX_DATA	TX_DATA	RS232 Interface
5	RX_DATA	RX_DATA	
6	LD MONITOR	LD MONITOR	Alarm Type: OpenCollector Normal- High Alarm- Low
7	LD ALARM	LD ALARM	
8	PD MONITOR	PD MONITOR	
9	PD ALARM	PD ALARM	

**FUNCTIONAL BLOCK DIAGRAM**



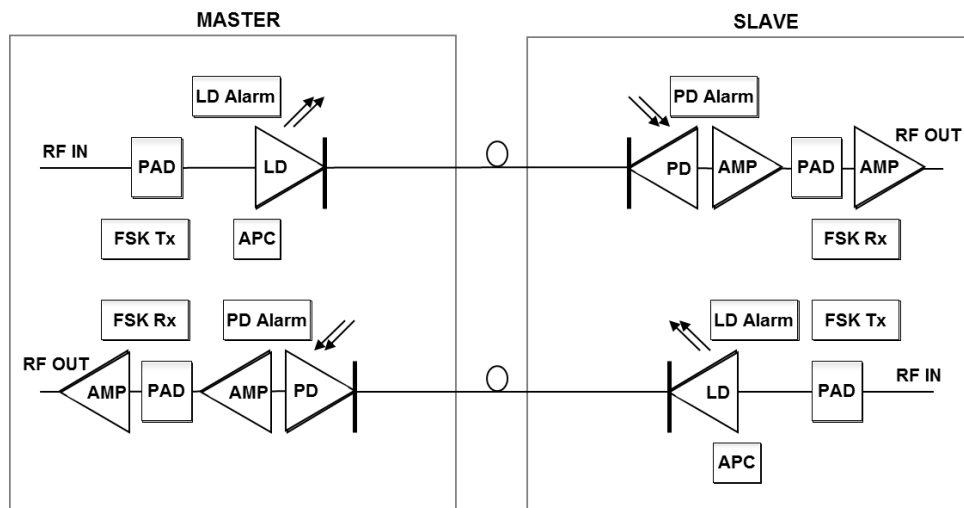
**MODULE CONNECTION (5WAVE FIBER OPTIC TRANSCEIVER)**



**PART NUMBER**

Model	Part Number	
	Master	Slave
2Waves	RTEO-xxMxxW2FS	RTOE-xxSxxxW2FS
3Waves	RTEO-xxMxxW3FS	RTOE-xxSxxxW3FSA, RTOE-xxSxxxW3FSB
4Waves	RTEO-xxMxxW4FS	RTOE-xxSxxxW4FSA, RTOE-xxSxxxW4FSB, RTOE-xxSxxxW4FSC
5Waves	RTEO-xxMxxW5FS	RTOE-xxSxxxW5FSA, RTOE-xxSxxxW5FSB, RTOE-xxSxxxW5FSC, RTOE-xxSxxxW5FSD

**VARIETAL MODEL (SINGLE WAVE WITHOUT WDM)**



# Fiber Optic Coupler

## SUMMARY OF FEATURES

- Low Excess Loss & High Performance
- Good Uniformity
- Wide Wavelength Range
- For Optical Repeater System
- For Local Area Network

## CWDM/WDM

PN	Port	Insertion Loss(dB)	Isolation (dB)	Feature
OC-T3CW	1310	1.3	30	
	1330	1.2	15	
	15xx	0.7	17	
OC-T2SW	1310	0.7	17	
	15xx	0.7	17	

\*Node Length: 500mm

## TAB

PN	Port	Insertion Loss(dB)	Feature
OC-WC82	20%	7.9	
	80%	1.2	
OC-WC73	30%	6.0	
	70%	1.9	
OC-WC64	40%	4.7	
	60%	2.7	
OC-WC55	50%	3.6	
	50%	3.6	

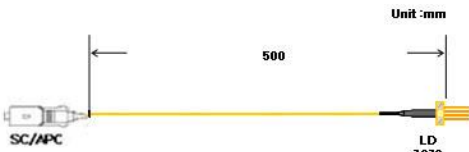
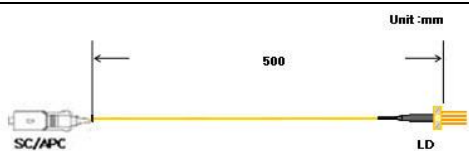
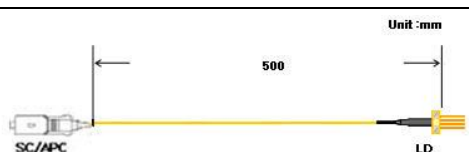
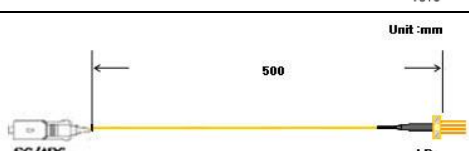
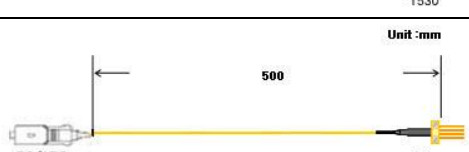
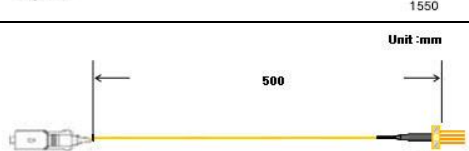
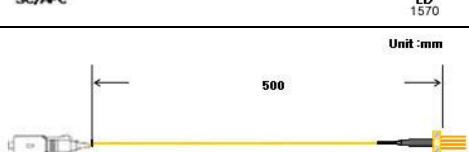
\*Node Length: 500mm

# LD(Optic Laser Diode)

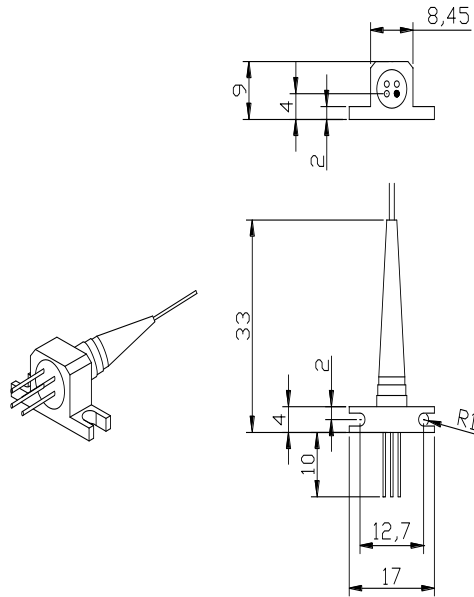
## SUMMARY OF FEATURES

- 1.31um/1.55um FD-LD or 1.27um to 1.61um DFB-LD(20nm Spacing)
- 2.3GHz Bandwidth
- Single-mode or Multi-mode Fiber Pigtailed with Optional Connector
- Customizing Design According to Customer Request
- For Local Area Network and Optical Repeater System

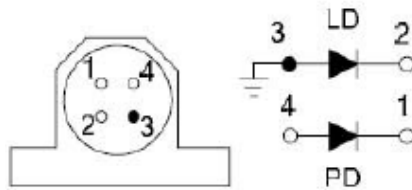
## MODEL

PN	Feature
LD1310	
LD1310	
LD1510	
LD1530	
LD1550	
LD1570	
LD1590	

**MECHANICAL DRAWING**



4 pin coaxial package with outer diameter 7.0±0.1mm



Bottom View

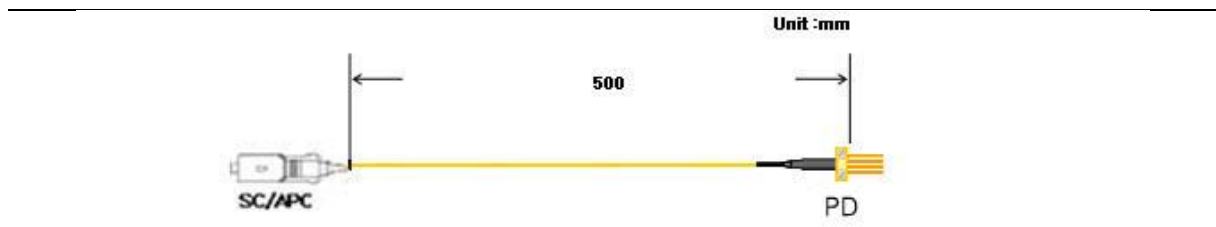
Pin No	Description
1	PD Cathode
2	LD Cathode
3	Case/LD Anode
4	PD Anode

# PD(Optic Photo Diode)

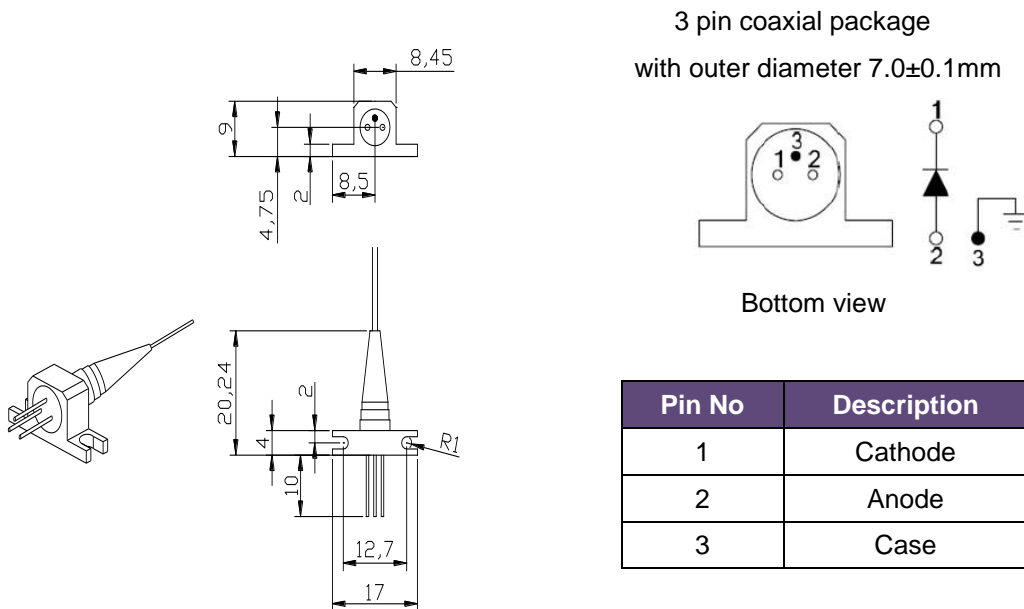
## SUMMARY OF FEATURES

- InGaAs PIN Photodiode, 2.3GHz Bandwidth
- Operation at 910nm~1650nm
- High Responsibility, Low Dark Current and Low Capacitance
- Maximum Input Optical Overload +10mW
- Customizing Design According to Customer Request
- For Local Area Network and Optical Repeater System

## STRUCTURE



## MECHANICAL DRAWING





# LD + PD + WDM + Optic Cable Assembly

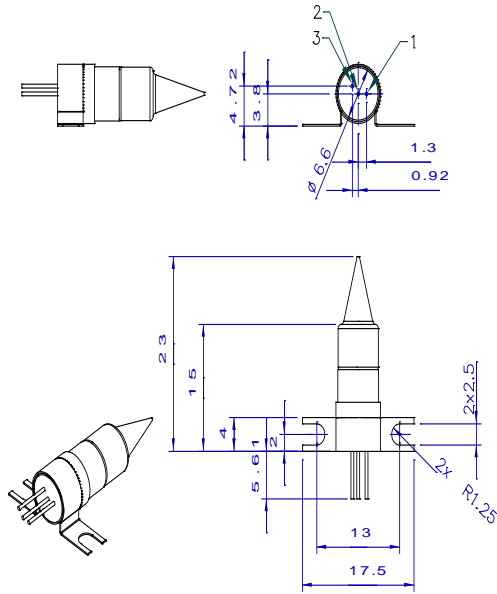
## SUMMARY OF FEATURES

- Low Excess Loss and High Performance
- Good Uniformity
- Coupling Ratio can be customized
- Optional Pre-connected Output
- Wide Wavelength Range
- For Local Area Network and Optical Repeater System

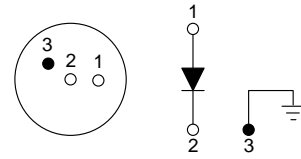
## MODEL

PN	Feature
OC-T2WM	
OC-T2WSA	
OC-T2WSB	
OC-T2WSC	

**MECHANICAL DRAWING**

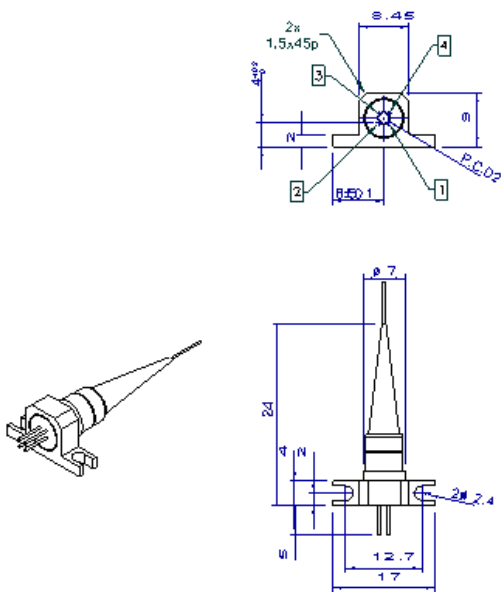


3 pin coaxial TO package  
with outer diameter 7.0±0.1mm

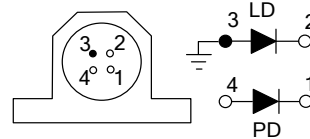


Bottom view

Pin No	Description
1	Cathode
2	Anode
3	Case



4 pin coaxial package  
with outer diameter 7.0±0.1mm



Bottom view

Pin No	Description
1	PD Cathode
2	LD Cathode
3	Case/LD Anode
4	PD Anode