

# Wavelength Locker

## Features:

- Extremely Low Temperature Dependence
- High Accuracy and Wide Optical Operation Power Range
- Temperature Sensor is also Available
- Operation over C & L Bands
- RoHS Compliant

## Applications:

- Wavelength Monitoring
- Stabilize the Channel Wavelength to ITU-T Grid Standard Wavelength in DWDM Systems
- Laser Stabilization for Tunable Laser
- Optical Power Monitoring
- Network Monitoring



## Specifications:

Parameter	Unit	50GHz Free Spectral Range	25GHz Free Spectral Range
Spectral Range	nm	C Band or C+L Band	C Band or C+L Band
Wavelength Spacing <sup>1</sup>	GHz	50	25
Locked Frequency Point		ITU-Grids or as Specified	ITU-Grids or as Specified
Center Channel Accuracy over Temperature, Polarization, and EOL <sup>2</sup>	Max. GHz	1.25	1.25
Polarization Dependent Accuracy	Max. GHz	0.8	0.8
Capture Range (from Nominal ITU Center Frequency)	Typ. GHz	-30~+12	-9~+9
Locking Slope at ITU Point	Min. dB/GHz	0.48	0.58
Optical Power Handling	Max. dBm	7	7
Optical Return Loss	Typ. dB	25	25
Photodiode Calibration Offset	Max. dB	+/-1.0	+/-1.0
PD Responsivity	Min. A/W	>0.16	>0.07
PD Dark Current at Room Temp	Typ. nA	1.0	1.0
Temperature Sensor Supply Voltage	Typ. V	5.0	5.0
Temperature Sensor Monitor	Typ. mV/°C	10	10
Fiber Type	Typ.	SMF-28e	SMF-28e
Operating Temperature	°C	-5~70	-5~70
Storage Temperature	°C	-40~+80	-40~+80
Relative Humidity	%	5~95	5~95

1. Calibrated at channel of use.
2. With temperature sensor.

**Dimension:**

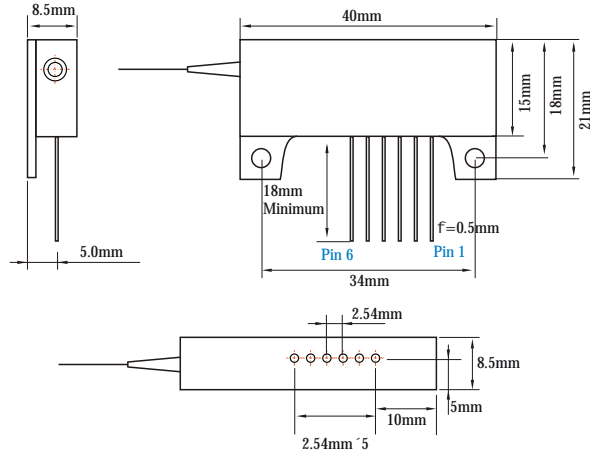


Figure 1. Wavelength Locker

**Pin Assignment:**

Pin No.	Description	Property	Note
1	Reference PD1 anode (+)	Signal	
2	Etalon PD2 anode (+)	Signal	
3	PD1, PD2 common cathode (-)	Signal	
4	Temperature sensor supply voltage	Power Supply	
5	Temperature sensor monitor	Signal	
6	Temperature sensor ground	Ground	

Note: Please refer to figure for pin assignment.

**Order Information:**

PKWL - X - XXXX - XXXX - XXX - XX  
A B C D E

A	Grade	A=Grade A
B	Wavelength	C Band C+L Band
C	Fiber Type	250S=250mm 900L=900mm loose tube
D	Free Spectral Range	25GHz 50GHz
E	Connector	NN=Without connector XY=With connector <sup>1</sup>

1. Please specify the type of connectors if connector is required.

Mechanical Type	Other	SC	FC	ST	MU	LC
X	0	1	2	3	4	5
Physical Contact Type	Other	PC	UPC	APC		
Y	0	1	2	3		