Ultra Low Ratio Tap Coupler (LTC Series)

Rev 11E

Description

The Ultra Low Ratio Tap Coupler splits a very small amount of light from a signal path to a tap port. Low tap ratios such as 0.1%, 0.01% or 0.001% enable the monitoring photodetector to operate without damage or saturation. It is suitable for very high optical power, its main application is in the monitoring of optical sources such as fiber lasers.

Key Features

- High Power Handling
- High Return Loss

Applications

- High Power Fiber Laser

Specifications

Parameter	Unit	Value		
Center Wavelength (λc)	nm	1064 or 1550 or specify		
Operating Wavelength	nm	λc ± 10		
Coupling Ratio	%	0.1	0.01	0.001
Tap Insertion Loss[1, 2]	dB	30 ± 3	40 ± 4	50 ± 5
Max. Signal Insertion Loss[1, 2]	dB	0.1		
Thermal Stability	dB/℃	≤ 0.002		
Min. Return Loss[3]	dB	55		
Max. Optical Power (Continuous Wave)[4]	W	30		
Operating Temperature	℃	- 40 to + 75		
Storage Temperature	℃	- 40 to + 85		
Fiber Type	-	Singlemode Fiber		

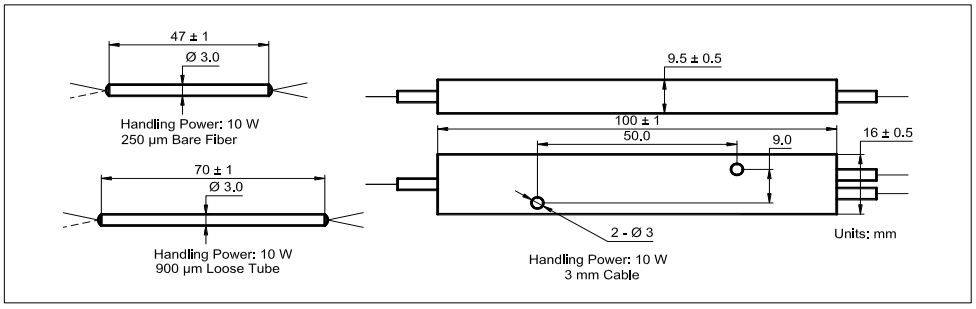
[1]Test at central wavelength only.

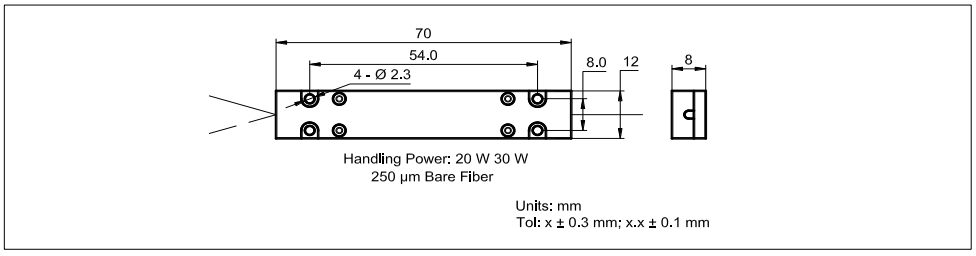
[2]IL is 0.5 dB higher for each connector added.

[3]RL is 5 dB lower for connector added.

[4]The Optical Power is 1 W only for connector added.

Package Dimensions





Ordering Information

LTC-①-②②-③-④-⑤-⑥-⑦-⑧

①: Configuration	②②: Wavelength	③: Coupling Ratio	④: Connector Type
1 - 1 × 2	06 - 1064 nm	3 - 0.1% (30 dB)	1 - FC/UPC N - None
2 - 2 × 2	55 - 1550 nm	4 - 0.01% (40 dB)	2 - FC/APC S - Specify
	SS - Specify	5 - 0.001% (50 dB)	3 - SC/UPC
		S - Specify	4 - SC/APC

⑤: Fiber Jacket	⑥: Fiber Length	⑦: Fiber Option	⑧: Handling Power
B - 250 μm Bare Fiber	1 - 1.0 m	4 - Corning HI 1060 Fiber	1 - 10 W
L - 900 μm Loose Tube	S - Specify	6 - Corning SMF-28 Fiber	2 - 20 W
3 - 3 mm Cable		S - Specify	3 - 30 W
S - Specify			