

Ultra Low Ratio Tap Coupler (LTC Series)

Rev 11

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.

Specifications

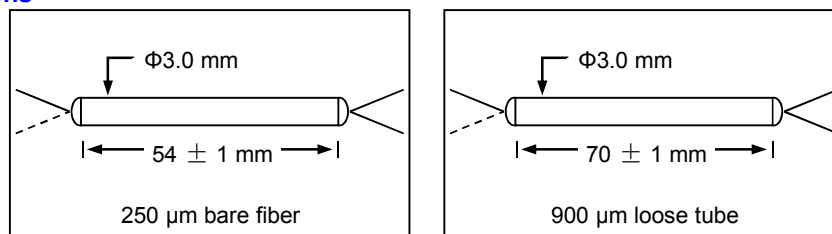
Parameter	Unit	Value		
Center Wavelength (λ_c)	nm	1064, 1550 or Specify		
Operating Wavelength	nm	$\lambda_c \pm 10$		
Coupling Ratio	%	0.1	0.01	0.001
Tap Insertion Loss	dB	30 ± 3	40 ± 4	50 ± 5
Max. Signal Insertion Loss	dB	0.1		
Thermal Stability	dB/°C	≤ 0.002 over -5°C to $+70^\circ\text{C}$		
Min. Return Loss	dB	55		
Max. Optical Power (Continuous Wave)	W	5		
Operating Temperature	°C	-5 to $+75$		
Storage Temperature	°C	-40 to $+85$		
Fiber Type		Singlemode fiber		

*IL is 0.5 dB higher, RL is 5 dB lower for each connector added.

*Test at central wavelength only.

*The optical power is 1 W only for connector added.

Package Dimensions



Ordering Information

LTC-①-②②-③-④-⑤-⑥

①: Configuration	②②: Wavelength	③: Coupling Ratio	④: Connector Type
1 - 1 × 2	06 - 1064 nm	3 - 0.1% (30dB)	1 - FC/UPC 4 - SC/APC
2 - 2 × 2	55 - 1550 nm	4 - 0.01% (40dB)	2 - FC/APC N - None
	SS - Specify	5 - 0.001% (50dB)	3 - SC/UPC S - Specify
		S - Specify	
⑤: Fiber Jacket	⑥: Fiber Length		
B - 250 µm bare fiber	1 - 1.0 m		
L - 900 µm loose tube	S - Specify		