

Technical Specification

Inline Isolator

1 Products Picture



2 Single Stage Optical Specification

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Fiber Operating wavelength range			1260~1660		nm	
Center Wavelength	λ_c		1310or1550		nm	
Operating wavelength range λ_{op}	λ_{op}		$\lambda_c \pm 20$		nm	
Insertion loss (1→2 @ λ_{op})	IL			0.5	dB	
Isolation (2→1 @ λ_{op} 23°C)	IS	28	30		dB	
Isolation (2→1 within λ_{op} , T_{op})	IS	20			dB	
Polarization dependent loss @ λ_c	PDL		0.05	0.1	dB	
Return loss @ λ_c	RL	55			dB	
Polarization mode dispersion	PMD			0.25	ps	
Optical power handling	P			500	mW	
Operating temperature range	T_{Op}	-5		70	°C	
Storage temperature	T_{Sto}	-40		85	°C	
Relative humidity (non-condensing)		5		95	%RH	
Physical dimensions (Standard Type)			(ϕ) 4.0; L <27 (Glass) or (ϕ) 5.5; L <36 (Steel)		mm	
Physical dimensions (Mini Type)			(ϕ) 3.0; L <30 (Steel)		mm	
Physical dimensions (Ultra Mini Type)			(ϕ) 2.6; L <17 (Steel)		mm	
Fiber length	L		> 1		m	
Fiber type			SMF-28e, 250um bare fiber			

3 Dual Stage Optical Specification

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Fiber Operating wavelength range		1260~1660			nm	
Center Wavelength	λ_c	1310or1550			nm	
Operating wavelength range λ_{Op}	λ_{Op}	$\lambda_c \pm 20$			nm	
Insertion loss (1→2 @ λ_{Op}, T_{Op})	IL			0.6	dB	
Isolation (2→1 @ $\lambda_{Op}, 23^\circ\text{C}$)	IS	46	50		dB	
Isolation (2→1 within λ_{Op}, T_{Op})	IS	40			dB	
Polarization dependent loss @ λ_c	PDL		0.05	0.1	dB	
Return loss @ λ_c	RL	55			dB	
Polarization mode dispersion	PMD			0.05	ps	
Optical power handling	P			500	mW	
Operating temperature range	T_{Op}	-5		70	$^\circ\text{C}$	
Storage temperature	T_{Sto}	-40		85	$^\circ\text{C}$	
Relative humidity (non-condensing)		5		95	%RH	
Physical dimensions (Standard Type)		(ϕ) 4.0; L <27 (Glass) or (ϕ) 5.5; L <36 (Steel)			mm	
Physical dimensions (Mini Type)		(ϕ) 3.0; L <30 (Steel)			mm	
Physical dimensions (Ultra Mini Type)		(ϕ) 2.6; L <17 (Steel)			mm	
Fiber length	L		> 1		m	
Fiber type		SMF-28e, 250um bare fiber				