



Free Space Isolator

Free space isolators are used in the high-speed optical transmitter or other pump laser which need to isolate the backward light. The isolators offer excellent performance with high isolation and low insertion loss. Available in single stage or semi-double stage options are centered at 1310nm, 1490 or 1550nm.

The free space isolators can offer a range of clear aperture diameters from 0.40mm to 1.5mm as standard. Packaging options include square round or U shaped housings.



Features

- ◆ High Isolation
- ◆ Polarization Dependent
- ◆ Optical Path Epoxy Free
- ◆ Compact size
- ◆ Versatile Package

Applications

- ◆ Optical Transmitter
- ◆ Laser Diode Packaging

Performance Specifications

Parameter	Single Stage		Dual Stage	
	P Grade	A Grade	P Grade	A Grade
Grade	P Grade	A Grade	P Grade	A Grade
Center Wavelength (λ_c)(nm)	1310 or 1550 and CWDM			
Min Peak Isolation (λ_c at 23°C)(dB)	40	38	60	55
Min Bandwidth isolation ($\lambda_c \pm 15$ nm at 23°C) (dB)	32	30	42	40
Max Insertion Loss (λ_c at 23°C) (dB)	0.20	0.25	0.40	0.50
Max Bandwidth Insertion Loss($\lambda_c \pm 15$ nm at 23°C) (dB)	0.30	0.35	0.50	0.60
Clear Aperture(mm)	\varnothing 0.9 or other		\varnothing 0.9 or other	
Max Optical Power(mW)	300		300	
Operating Temperature(°C)	-40 to +85		-40 to +85	
Storage Temperature(°C)	-40 to +100		-40 to +100	

**Specifications may change without notice

Order information

FSI-①-②-③③-④④④-⑤⑤

①	②	③③	④④④	⑤⑤
Type	Grade	wavelength	Clear aperture	Size
S:Single stage D: Dual stage	P:P Grade A:A Grade	31:1310nm 49:1490nm 55:1550nm S:Specify	045:0.45mm 070:0.70mm 110:1.10mm	1:2.5*1.4*1.8mm 2:2.5*2.15*1.8mm 3:2.5*2.15*2.0mm 4:2.5*2.15*3.0mm 5:Ø2.99*3.0mm 6:Ø2.5*1.4mm 7:Ø2.5*1.8mm 8:Ø2.5x2.0mm 9:Ø2.5*3.0mm S:Specify