



Free Space Isolator (FSI Series)

The Free Space Isolator series is designed for integration within laser diode package to prevent back reflection. The high isolation, low insertion loss and large aperture features make it flexible to fit with different diode laser packaging requirements.



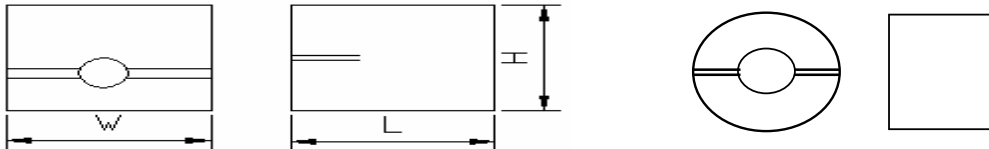
Specifications

Parameter	Unit	Single Stage	Dual Stage
Center Wavelength (λ_c)	nm	1310 or 1550	
Peak Isolation	dB	42	55
Min. Isolation over $\lambda_c \pm 15\text{nm}$ at 23	dB	35	45
Typ. Insertion Loss	dB	0.15	0.25
Max. Insertion Loss	dB	0.25	0.35
Clear Aperture	mm	0.9	
Max. Optical Power	W/cm ²	100	
Polarization Plane of Input		As indicated	
Tilt Angle of Input Polarization	deg	7 or specify	
Operation Temperature		0 to +60	
Storage Temperature		-40 to +85	

Reliability test specifications

High Temperature Storage Test	85 for 500 hours
Low Temperature Storage Test	-40 for 500hours
High Temperature Test	230 for 3 minutes
Temperature Cycling Test	-40 to 85 , rate 2 , dwell time at extremes for 20 minutes,500 cycles
Vibration Test	10-2000Hz sinusoidal, 20g acceleration, 3 axes
Impact Test	8 drops per axis, 1.8 meters high

Package Dimensions



One stage W2.5xH2.15xL1.8mm³ (1310nm)
 W2.5xH2.15xL2.0mm³ (1550nm)
 W4x*H4xL1.5mm³ (1310nm)
 W4xH4xL1.7mm³ (1550nm)
 Two stage W2.5xH2.15xL2.6mm³ (1310nm)
 W2.5xH2.15xL3.0mm³ (1550nm)

One stage dia4xL2.5mm
 Two stage dia4xL2.6 (1310nm)
 dia4xL3.0 (1550nm)

Ordering Information

FSI- - - -

: Stage

- 1 - One stage
- 2 - Dual stage

:Grade

- A- A grade
- S - Specify

: Wavelength

- 31 - 1310nm
- 55 - 1550nm
- SS - Specify

:Package Size

- 1 - 2.5x2.15
- 2 - 4x4
- 3 - dia4