

PRODUCT INFORMATION SHEET

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 laserpackaging requirements.

Specifications

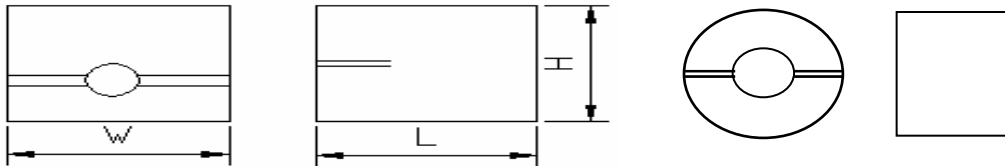
Parameter	Unit	Single Stage	Dual Stage
Center Wavelength (λ_c)	nm	1310 or	1550
Peak Isolation	dB	42	55
Min. Isolation over $\lambda_c \pm 15\text{nm}$ at 23°C	dB	32	45
Typ. Insertion Loss	dB	0.15	0.25
Max. Insertion Loss	dB	0.25	0.35
Clear Aperture	mm	0.9	
Max. Optical Power	W/cm ²	100	
Polarization Plane of Input		As Indicated	
Tilt Angle of Input Polarization	deg	0 or Specify	
Operating Temperature	°C	0 to +60	
Storage Temperature	°C	-40 to +85	

Reliability Test Specifications

High Temperature Storage Test	85°C for 500 hours
Low Temperature Storage Test	-40°C for 500hours
High Temperature Test	230°C for 3 minutes
Temperature Cycling Test	-40°C to 85 °C, rate 2°C, 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

*For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

Package Dimensions



Single Stage W2.5xH2.15xL1.8mm (1310nm)
W2.5xH2.15xL2.0mm (1550nm)

Single Stage dia2.5xL2.0mm
Dual Stage dia2.5xL2.5mm

Dual Stage W2.5xH2.15xL2.6mm (1310nm)
W2.5xH2.15xL3.0mm (1550nm)

Ordering Information

FSI-①-②-③-④

① Stage

1-Single Stage

2-Dual Stage

② Wavelength

31 - 1310nm

55 - 1550nm

③ Grade

A- A grade

S - Specify

④ Package Size

1 - 2.5x2.15mm

2 - dia2.5mm

S - Specify