

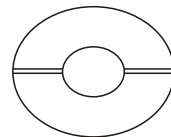
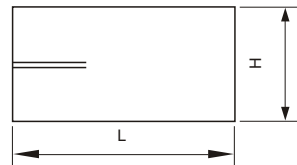
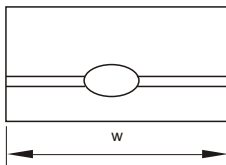
# Free Space Isolator (FSI Series)

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			
Parameters	Unit	Single Stage	Dual Stage
Center Wavelength	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 <sup>2</sup>		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 500 hours
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

## Package Dimensions



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

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

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

## Ordering Information

**FSI-①-②②-③-④**

①: Stage  
1 - Single Stage  
2 - Dual Stage

②②: Wavelength  
31 - 1310nm  
55 - 1550nm  
SS - Specify

③: Grade  
A - Agrade  
S - Specify

④: Package Size  
1 - 2.5x2.15mm  
3 - dia2.5mm  
S - Specify