

## Variable optical attenuator : YS-5010type



The YS-5010 is a variable optical attenuator applying the Faraday effect of magneto-optical crystals. The attenuation levels can be adjusted continuously by current control. Due to the exclusion of any moving parts, it has attained a high reliability and rapid response.

### Features

- Compact size (Cylindrical)
- Non-Mechanical (using Magneto-optics technology)
- High reliability
- Fast response
- Current control

### Specifications

Items	YS-5010-155		YS-5010-159		Conditions
	Min.	Max.	Min.	Max.	
Wavelength range ( $\lambda_0$ )	1530 nm	1565 nm	1570 nm	1610 nm	
Driving Current ( $I_{op}$ )		70 mA		70 mA	
Minimum Attenuation		1.5 dB		1.5 dB	at $T_0, \lambda_0, 0mA$
Maximum Attenuation	30 dB		30 dB		at $T_0, \lambda_0, I_{op}$
Polarization dependent loss		0.5 dB		0.5 dB	at $T_0, \lambda_0, I_{op}$
Wavelength Dependent Loss		0.7 dB		0.8 dB	$\leq 20dB$ attenuation
Polarization mode dispersion		0.05 ps		0.05 ps	at $T_0, \lambda_0, I_{op}$
Return loss	40 dB		40 dB		at $T_0, \lambda_0, I_{op}$
Response Speed		1 msec		1 msec	
Max. incident power		500mW		500mW	
D.C. Resistance	27 $\Omega$				25 $^{\circ}C$
Inductance	12 mH				25 $^{\circ}C$
Insulation	1 M $\Omega$		1 M $\Omega$		100V.1min
Fiber type	Corning SMF28e+ or equivalent				
Fiber length	1m min				
Connector type	None				

Operating temp. range [ $T_0$ ]	-5~+70degC
Storage temp. range [ $T_s$ ]	-40~+85degC

### Shapes and dimensions

