

Polarization Controller

Features/Benefits

- No-moving parts
- Wide operating wavelength range
- High extinction ratio
- Low insertion loss
- Low PDL
- Low PMD
- Low power consumption

Applications

- PMD compensators
- Polarization generators
- Polarization multiplexers
- Polarization scramblers
- Polarization instrumentation

Pin Layout

Pin No#	Description
1 & 10	R _{TD} (optional)
2 & 9	Cell 1 0°
3 & 8	Cell 2 45°
4 & 7	Cell 3 0°
5 & 6	Cell 4 45°

Specifications

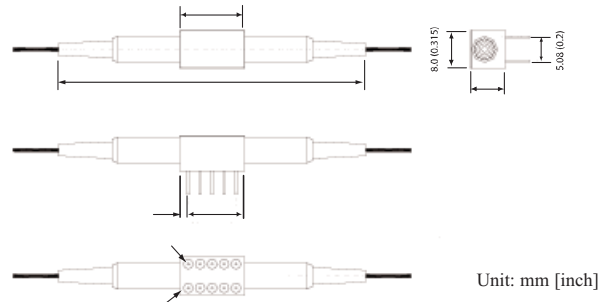
Parameters	Unit	3-Cell Option	4-Cell
Operating Wavelength Range	nm	1525 ~ 1615	
Insertion Loss (w/o connector)	dB	≤ 1.2	≤ 1.5
Wavelength Dependent Loss	dB	≤ 0.5	≤ 0.5
Extinction Ratio	dB	≥ 30	≥ 30
Response Speed @ 23°C	ms	Typ. 100	Typ.100
Polarization Mode Dispersion	ps	≤ 0.1	≤ 0.1
Optical Return Loss (w/o connector)	dB	≥ 50	≥ 50
Activation Loss **	dB	≤ 0.1	≤ 0.1
Driving Voltage (w/o driver)	V	0 ~ 20 Peak to Peak, 10 KHz Square Wave	
Driving Voltage (w/ driver)	V	0 ~ 5VDC	
Operating Temperature	°C	0 ~ 65	
Storage Temperature	°C	-40 ~ 85	
Operating Humidity	%RH	0 ~ 95	

** Defined to be the maximum variation in insertion loss as the polarization controller is adjusted to cover all polarization states.

Absolute Maximum Ratings

Parameters	Unit	Specification
Optical Input Power	dBm	≥ 23
Power Consumption	mW	1 per cell

Dimensions



Ordering Information

P	C		0	1	2			0	0	0				0	
		Platform 3= 3-cell LC 4= 4-cell LC	Thermal Sensor Option 0= w/o R _{TD} 1= w R _{TD}			Driver D= no driver I= w /driver		Pigtail Type of Input 0= 250 μm 1= 900 μm All 1 m in length		Fiber Type of Output 0= SMF-28 1= PM		Pigtail Type of Output 0= 250 μm 1= 900 μm 2= 400 μm All 1 m in length			Connector 0= None 1= FC/UPC 2= FC/APC 3= SC/UPC 4= SC/APC 5= LC/UPC 6= MU/UPC

This product information is subject to change without notice.