Fiber Phase Shifter

FPS-001

General Photonics' all fiber phase shifter/modulator provides phase shifts up to 15π at frequencies from DC to 20 kHz. The all fiber construction practically eliminates insertion loss and back reflection. This compact device is ideal for fiber laser systems, fiber resonators, and fiber interferometers for precision phase tuning or phase modulation.

Making Light Work Lighter
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Specifications

Insertion Loss	<0.1 dB>3 mm
Return Loss	>65 dB
Total Phase Shift (0 to 20 kHz)	>8π
Half Wave voltage (0 to 20 kHz)	<20V
Operating Wavelength[1]	1260 to 1650nm or 980 to 1310nm standard
PDL	<0.05 dB
Residual Amplitude Modulation	±0.01 dB
Maximum Applied Voltage	150V
Operation Temperature	0 to 50° C
Storage temperature	-40° to 80° C
Dimensions	Pigtailed: 1.38" (L) × 0.55" (W) × 0.55" (H) NoTail™: 2.90" (L) × 0.55" (W) × 0.55" (H)

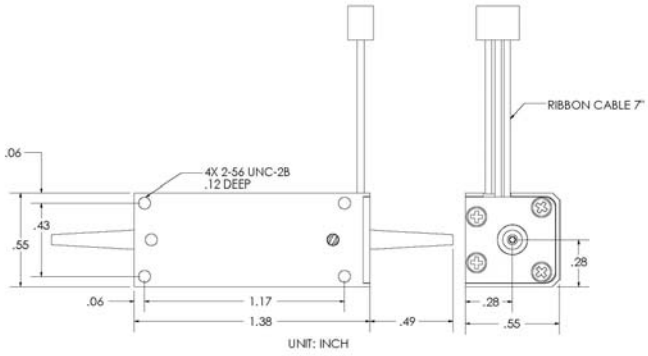
Note: Values are referenced without connectors.
1. Other wavelengths and fiber types available by request.

Applications:

- Fiber interferometers
- Fiber laser systems
- Fiber sensor systems

Features:

- Compact
- Low insertion loss
- Low residual amplitude modulation
- Low PDL
- Low cost
- NoTail™ model available



Ordering Information:

FPS - 001 – XX – XX – XX – XXX

Wavelength:
01 = 1260-1650nm
02 = 980-1310nm

Fiber Type:
SS = SM fiber

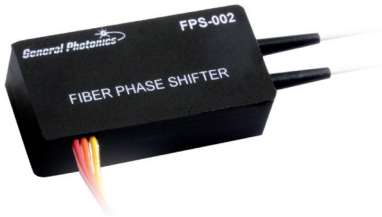
Pigtail:
90 = 900μm jacket
NT = NoTail

Connector Type:
FC/PC, FC/APC
SC/PC, SC/APC
Others specify

GP-DS-FPS-001-10
6/5/15

Timing/Delay Modules

Fiber Phase Shifter



Coherent or interferometric sensor systems, such as distributed acoustic sensors (DAS), often require a low loss, low-cost phase shifter or modulator to obtain the desired sensing signals. General Photonics' 2nd generation all fiber phase shifter/modulator provides phase shifts up to 75π with a much lower half-wave voltage (~2 volts as compared with 10-20 volts for the 1st generation phase shifter) at frequencies from DC to 20 kHz. The all fiber construction practically eliminates insertion loss and back reflection. In addition to fiber sensor systems, this compact device is ideal for fiber laser systems, fiber resonators, and fiber interferometers for precision phase tuning or phase modulation.

Preliminary Specifications:

Insertion Loss	< 0.5 dB
Return Loss	> 65 dB
Total Phase Shift (0 ~ 20 kHz)	75π
Half-wave Voltage (0 ~ 20 kHz)	~ 2V
Operating Wavelength	1260 - 1650 nm standard
PDL	< 0.05 dB
Residual Amplitude Modulation	± 0.01 dB
Operating Temperature	0 to 50 °C
Storage Temperature	-40 to 85 °C
Max. Applied Voltage	150 volts
Dimensions	35.0 (L) x 17.0 (W) x 10.0 (H) mm

Note: Values are referenced without connectors

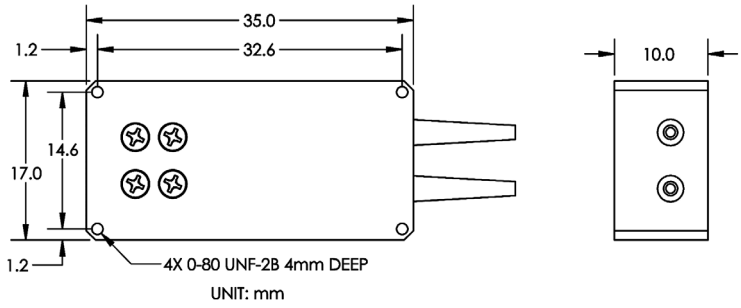
Features:

- Low half-wave voltage
- Large phase shift range
- Compact size
- Low insertion loss
- Low residual amplitude modulation
- Low PDL
- Low cost

Applications:

- Fiber interferometers
- Fiber laser systems
- Fiber sensor systems

Dimensions (in mm):



Ordering Information:

FPS — 002 — □□ — □□ — □□ — □□□□

Wavelength Range:	Pigtail:	Fiber Type:	Connector type:
01 = 1260 - 1650 nm	90 = 900 µm jacket	SS = SM fiber	FC/PC, FC/APC SC/PC, SC APC or NC = no connectors Other specify