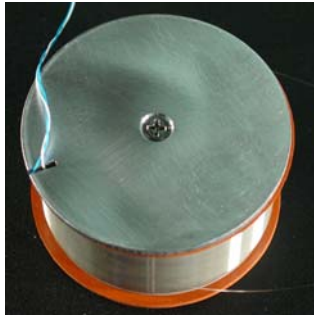


The **OPTIPHASE® PZ2 High-efficiency Fiber Stretcher** is a fiber wound piezo-electric element for use in a wide range of optical interferometric measurement and sensing system applications. Typical uses include open loop demodulation, sensor simulation, white-light scanning interferometers and large angle modulation of interferometric phase.

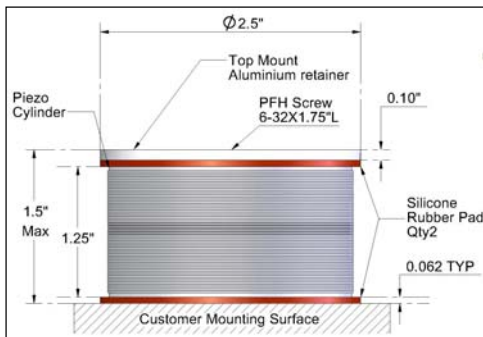
Optiphase's expertise in the design, manufacture and use of all-fiber interferometers has produced a unique multi-layer winding approach resulting in an enhanced modulation function while maintaining a high operational frequency [see charts]. PZ2 Fiber stretchers are available with SMF-28e+ or PM [PANDA] fiber types. Fiber stretchers with connectors are housed in an enclosure, making set-up and use quick and easy. Fiber stretchers with bare leads are not enclosed and include a convenient mounting kit consisting of a top mount aluminum retainer and two silicone rubber pads.



Bare Lead Fiber Stretcher with Mounting Kit



Enclosed Fiber Stretcher with Connectors



Model	Description
PZ2-HE	High-efficiency SMF Fiber Stretcher, bare leads, Mounting Kit
PZ2-HE-FC/PC-E	High-efficiency SMF Fiber Stretcher, FC/PC connectors, Enclosed
PZ2-HE-FC/APC-E	High-efficiency SMF Fiber Stretcher, FC/APC connectors, Enclosed
PZ2-PM-1.5	High-efficiency PM Fiber Stretcher, bare leads, Mounting Kit
PZ2-PM-1.5-FC/PC-E	High-efficiency PM Fiber Stretcher, FC/PC connectors, Enclosed
PZ2-PM-1.5-FC/APC-E	High-efficiency PM Fiber Stretcher, FC/APC connectors, Enclosed

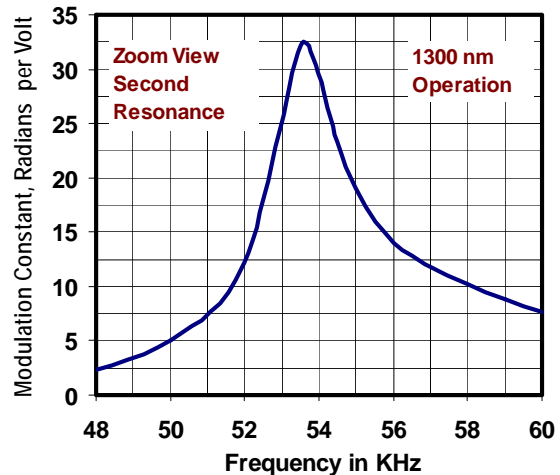
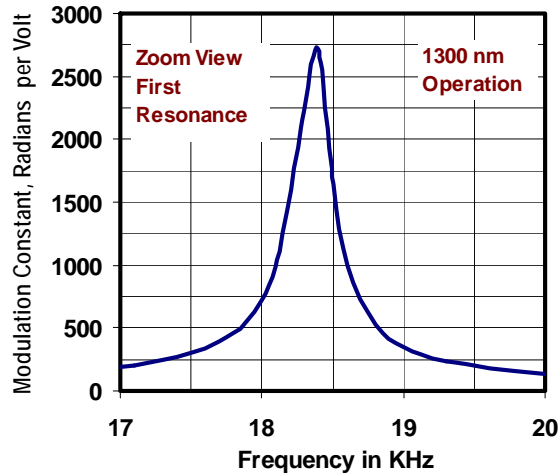
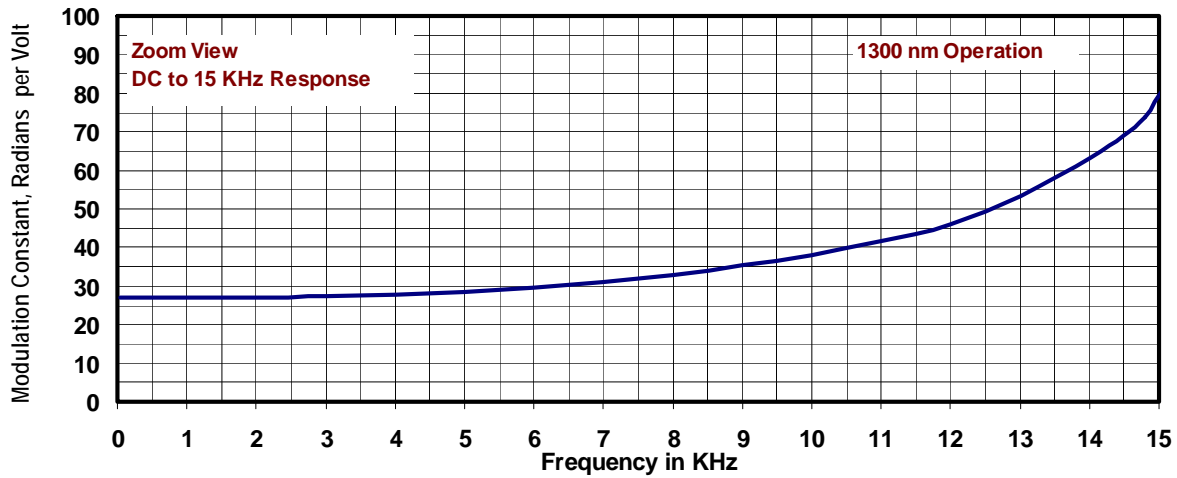
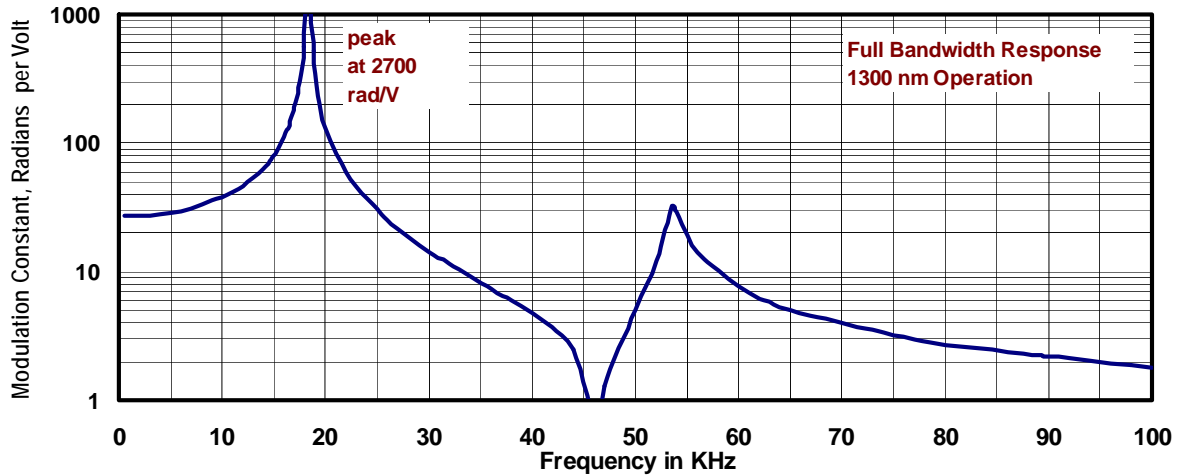
Other wavelengths and PM fiber types available upon request.

SPECIFICATIONS

MODULATOR	SMF FIBER	PM FIBER
Operational Wavelengths	1260 to 1625 nm	1550 nm
Modulation Constant [< 5 KHz]	27 radians/V @ 1.3 μ m 23 radians/V @ 1.55 μ m	23 radians/V @ 1.55 μ m nominal
Fiber Stretch Optical Path Delay	3.8 μ m/V 5.6 μ m/V	3.8 μ m/V 5.6 μ m/V
Delay	0.019 ps/V	0.019 ps/V
Linearity	3% at full scale drive	3% at full scale drive
Frequency Range	See chart page 2	See chart page 2
Optical Loss	≤ 0.5 dB, typical 0.2 dB	≤ 0.5 dB, not including connectors
Extinction Ratio	n/a	≥ 24 dB bare leads; ≥ 22 dB with fiber connectors
Maximum Voltage Range [low frequency]	± 400 V [800V P-P]	± 400 V [800V P-P]
Impedance [off resonance]	Capacitance 0.1 μ F, floating	Capacitance 0.1 μ F, floating
Wire Lead	18 inches, flying leads, #30	18 inches, flying leads, #30
Operational Temperature Range	0° to 70° C	0° to 70° C
Fiber Type	SMF-28e+, 250 μ m acrylate jacket	Corning PM15-U25A
Fiber Length	40 meters [includes 1 m bare fiber leads]	40 meters [includes 1 m bare fiber leads]
Fiber Wind	2-Layer	2-Layer
Dimensions & Weight		
Bare Lead Fiber Stretcher	2.5" Diameter x 1.5" High [without mounting surface]; 80 grams	2.5" Diameter x 1.5" High [without mounting surface]; 80 grams
Enclosed Fiber Stretcher	Enclosure: 4" W x 6" L x 1.75" H; 16 oz	Enclosure: 4" W x 6" L x 1.75" H; 16 oz
MOUNTING KIT	Included	
Top Mount Aluminum Retainer [qty 1]	2.5 inch diameter, 0.1 inch thickness	
Silicone Rubber Pads [qty 2]	2.5 inch diameter, 0.0625 inch thickness	
Screw [qty 1]	#6-32 flathead screw, 1.75" Long	

Made in U.S.A.

PZ2 Modulator Constant Over Frequency, Typical 1300 nm. For 1550 nm, derate by 20%



SMF-28e and SMF-28e+ are registered trademarks of Corning Incorporated.