



MEMS VOA Fiber-Fiber TM (Multimode)

(Protected by US Patent 10752492B2)

Product Description

The *Fiber-Fiber*[™] series VOA is based on direct fiber to fiber coupling with a micro-electro-mechanical shutter in between, featuring ultra-broadband without coating, compact size, easy to drive, and compatible with all types of fiber with an outer diameter of 125 µm. The *Fiber-Fiber* series VOA is compliant with the Telcordia 1209 and 1221 reliability standards. The VOA is driven by directly applying an electrical voltage below 4.5V.



- Low Insertion Loss
- High Reliability
- Low Cost
- Low power consumption
- Super compact

Applications

- Dynamic gain equalization
- Variable MUX/DeMUX
- Instrumentation



Fiber-Fiber [™] series VOA		Min	Typical	Max	Unit
Wavelength	•	300		2000	nm
Band Width	Transmission is the same as the intrinsic fiber				
Insertion Loss [1]			0.8	1.2	dB
Attenuation Resolution		Continuous dB			
Attanuation Dance	Core<60 μm		35	50	dB
Attenuation Range	Core ~ 105 μm		25	35	
Return Loss			30	40	dB
Response Time		5	15	30	ms
Power Handling			500	800	mW
Driving Voltage (full range)		•	3.5	5	VDC
Power Consumption [2]			80	220	mW
Reliability	Telcordia 1209 and 1221				
Operating Temperature	•		-5 ~ 70	1	°C
Storage Temperature	-40 ~ 85 °C				°C
Fiber Type	50/125, 62.5/125,				
Package Dimension	See drawing below mm				

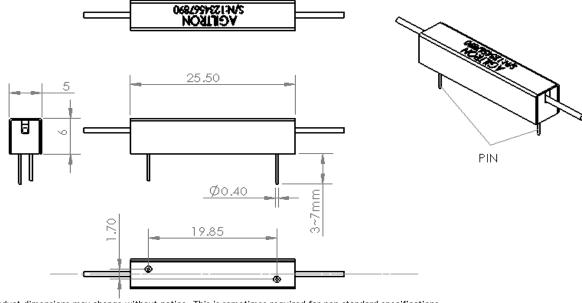
Notes:

- [2] Measure with CPR<20 laser/LED source and excluding connectors
- [3] At full range

15 Presidential Way, Woburn, MA 01801 Tel: (781) 935-1200 Fax: (781) 935-2040

Mechanical Dimensions-Package





*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Electrical Driving Information

Pin No.	Definition	Voltage(V)	Pin No.	Definition	Voltage(V)
1	VOA	0 ~ 4.7	2	VOA	0

no polarity, electrostatic insensitive

Ordering Information

FVOA-							
	Configuration	Туре	Test Wavelength	Fibe	r type	Fiber Length	Connector
	Standard = 11 Special=00	Normally Open=1 Special=0	488 = 4 532 = 5 630 = 6 780 = 7 850 = 8 980 = 9 1060 = 1 1310 = 3 1550 = C 2000 = 2 Special = 0	Pick from below table	Bare fiber=1 900um tube=3 Special=0	0.5m=2 1.0m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Duplex LC=8 MTP = 9 Special=0

01	SM-28	31	PM1550	61	OM1
02	SMF-28e	32	PM1950	62	OM2
03	Corning XB	33	PM1310	63	OM3
04	SM450	34	PM400	64	OM4
05	SM2000	35	PM480	65	GIF50
06	SM600	36	PM630	66	GIF625
07	Hi780	37	PM780		
08	SM800	38	PM850	71	FG50LGA
09	Hi980	39	PM980	75	FG105LCA
10	Hi1060	43		76	
11	SM200	44		77	
12	Draka BBE	45		78	

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