

9~16 Channel *et*MEMS™ VOA Array

(US patent 8,666,218 and other patents pending)

Product Description

The *et*MEMS™ series VOA is based on a micro-electro-mechanical mechanism featuring compact design, simple construction, easy direct drive, and excellent optical performance. The *et*MEMS™ series VOA is compliant with the Telcordia 1209 and 1221 reliability standards. The VOA is driven by directly applying an electrical voltage.

Performance Specifications

Features

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

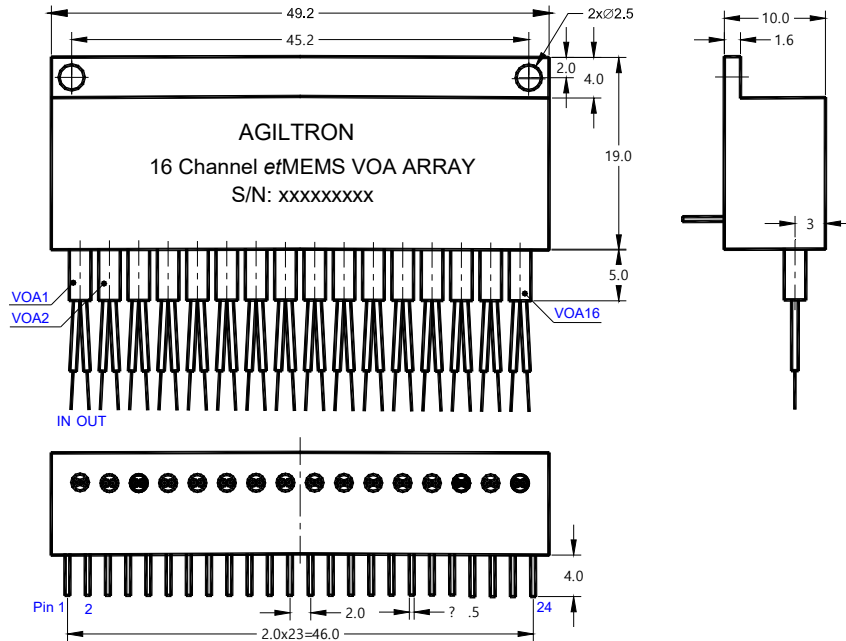
Applications

- Dynamic gain equalization
- Variable MUX/DeMUX
- Instrumentation

9~16 Channel <i>et</i> MEMS™ VOA array	Specification	Unit
Operating Wavelength	1310±50; 1550±50	nm
Insertion Loss ¹	≤ 0.8	dB
Attenuation Dynamic Range	> 30	dB
Polarization Dependant Loss (0~20dB)	0.2typ.; 0.5max.	dB
Wavelength Dependant Loss (40nm band, 0~20dB)	0.45typ.; 0.8max.	dB
Polarization Mode Dispersion	≤ 0.05	ps
Optical Cross Talk	≥ 65	dB
Attenuation Resolution	Continuous	dB
Response Time (0~20dB)	≤ 5	ms
Minute Return Loss (Input / Output)	45min.	dB
Power Dissipation	40typ.	mW/Ch
Power Consumption ²	≤ 1	W
Electric Input (DC)	5	V
Operating Temperature	-5 ~ +75	°C
Storage Temperature	-40 ~ +85	°C
Optical Power Handling ³	≤ 250	mW/ch
Relative Humidity Range	0 ~ 85	%
¹ Without connector ² Including control circuit ³ Total power<1W, otherwise need consider heat sink. ⁴ Customer may request smaller box for fewer channels.		

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Mechanical Dimensions-Package Type 1



Pin No.	Electronic Drive	VOA No.	Pin No.	Electronic Drive	VOA No.	Pin No.	Electronic Drive	VOA No.	Pin No.	Electronic Drive	VOA No.
1	0~5V	1	7	0~5V	5	13	0~5V	9	19	0~5V	13
2	0~5V	2	8	0~5V	6	14	0~5V	10	20	0~5V	14
3	0~5V	3	9	0~5V	7	15	0~5V	11	21	0~5V	15
4	0~5V	4	10	0~5V	8	16	0~5V	12	22	0~5V	16
5	GND		11	GND		17	GND		23	GND	
6	GND		12	GND		18	GND		24	5V Power Supply	

Ordering Information

VOAA-	Type	Wavelength	Off State	Package	Fiber	Fiber Length	Connector
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	9 channel =09 10 channel =10 11 channel =11 12 channel =12 13 channel =13 14 channel =14 15 channel =15 16 channel =16	1310=3 1550 = 5 1260-1620= 8 Special = 0	Transparent=1 Opaque = 2	Standard=1 Special=0	SMF-28 =1 Special = 0 Bare fiber=1 900um loose tube=3 Special = 0	0.25m= 1 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 Special = 0