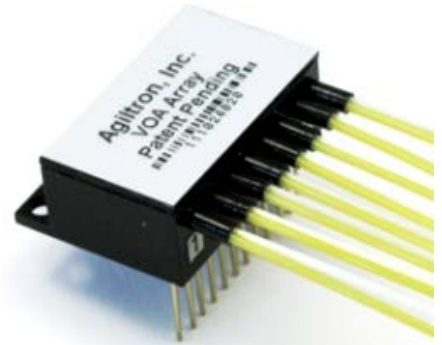


8 Channel etMEMS™ Variable Attenuation Array (Compact Size)

US patent 8,666,218 and other patents pending

Product Description

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



Performance Specifications

2~8 Channel etMEMS™ VOA array	Specification	Unit
Operating Wavelength	1310±50, 1550±50	nm
Insertion Loss (without connector)	0.6 typ., 0.8 max.	dB
Attenuation Dynamic Range	55	dB
Polarization Dependent Loss (0~20dB)	≤ 0.1	dB
Wavelength Dependent Loss (40nm band, 0~20dB)	0.45 typ., 0.8 max.	dB
Polarization Mode Dispersion	≤ 0.05	ps
Optical Cross Talk	≥ 65	dB
Attenuation Resolution	Continuous	dB
Response Time (0~20dB)	5 typ., 10 max.	ms
Return Loss (Input / Output)	> 45	dB
Maximum Power Consumption	≤ 170 [1]	mW/Ch
Electric Power Input (DC)	5	V
Electrical Control Signal	0 ~ 4.5	V
Operating Temperature	-5 ~ +75	°C
Storage Temperature	-40 ~ +85	°C
Optical Power Handlin	300 typ., 500 max.	mW/ch
Relative Humidity Range	0 ~ 85	%

1. At the maximum attenuation 55 dB, typical 40 mW at 30dB.

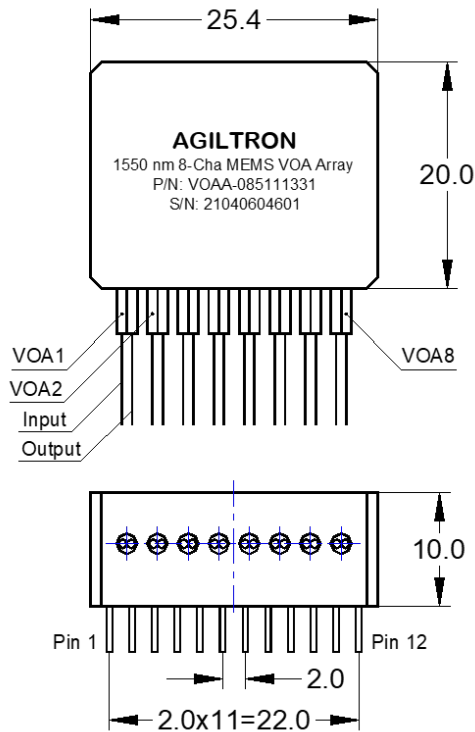
Revised on 5/7/21

Features

- Low Loss
- High Reliability
- Compact

Applications

- Gain Control
- Power Equalizer



All pin dimension is Ø0.5 mm, 4 mm length. Pins can be used to mount the VOA Array

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

Driving Instruction

Pin 1	VOA 1 (0~5V)	Pin 7	VOA 5 (0~5V)
Pin 2	VOA 2 (0~5V)	Pin 8	VOA 6 (0~5V)
Pin 3	VOA 3 (0~5V)	Pin 9	VOA 7 (0~5V)
Pin 4	VOA 4 (0~5V)	Pin 10	VOA 8 (0~5V)
Pin 5	GND	Pin 11	GND
Pin 6	GND	Pin 12	5V power supply

Ordering Information

VOAA-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Off State	Package	Fiber	Fiber Length	Connector		
	8-ch =08 7-ch =07 6-ch =06 5-ch =05 4-ch =04 3-ch =03 2-ch =02	1310=3 1550 = 5 1260~1620= 8 Special = 0	Transparent=1 Opaque = 2	Special=0	SMF-28 =1 Special = 0 Bare fiber=1 900 um loose tube=3 Special = 0	0.25m= 1 0.5m = 2 1.0m= 3 Special =0	None = 1 FC/PC = 2 FC/APC = 3 LC = 7 Special = 0		