

0 to 30 dB Programmable USB Controlled Step Attenuator With a 1 dB Step SMA Female To SMA Female From 100 MHz To 18 GHz

The FMAT3900 is a 5 Bit Programmable 30 dB Pin Diode Attenuator with Step Resolution of 1 dB over the Operating Frequency Range from 0.1 GHz to 18 GHz. This attenuator is controlled and powered via USB 2.0 with driverless installation, so no external power supply is required.

Electrical Specifications (Values at 25°C, sea level)

Description	Min	Typ	Max	Unit
Frequency Range	0.1		18	GHz
Mean Attenuation Range	0		30	dB
Insertion Loss		5		dB
Input VSWR		2.5:1		
Output VSWR		2.5:1		
Accuracy of Attenuation 0 dB to 30 dB		±2.5		dB
Step Size	1			dB

Mechanical Specifications

Size	
Length	2.25 in [57.15 mm]
Width	1 in [25.4 mm]
Height	0.33 in [8.38 mm]
Connector 1	SMA Female
Connector 2	SMA Female

Environmental Specifications

Temperature	
Operating Range	-40 to +85 deg C
Storage Range	-55 to +125 deg C

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

Not RoHS Compliant

Plotted and Other Data

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.//Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.



Features:

- Programmable 30 dB Pin Diode Attenuator
- 0.1 GHz to 18 GHz Frequency Range
- 30 dB Attenuation Range
- Step Resolution of 1 dB
- Insertion Loss 5 dB Typ

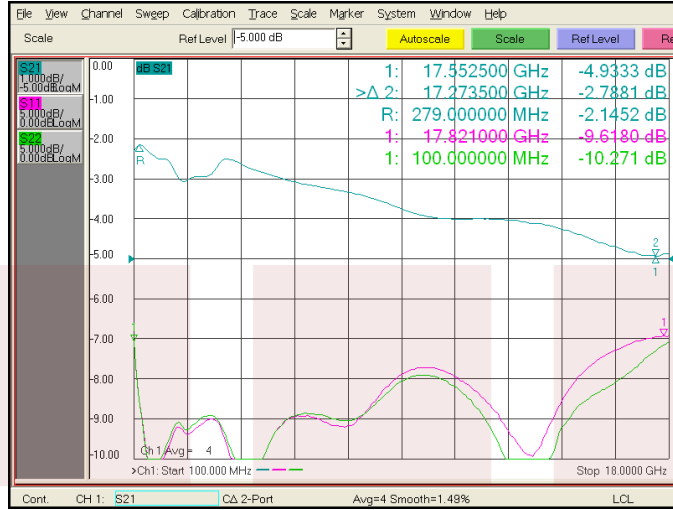
Applications:

- Electronic Warfare
- Test & Measurement
- Military & Space
- Radar
- Military Communications Systems

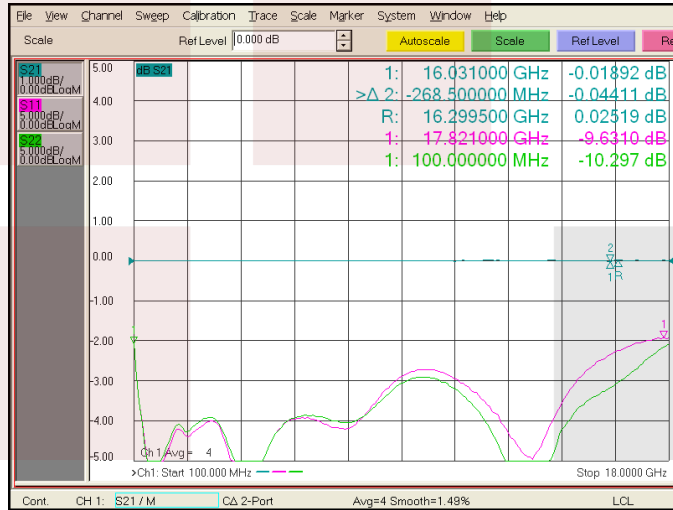
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Typical Performance Data

Insertion Loss & Return Loss



0dB Attenuation



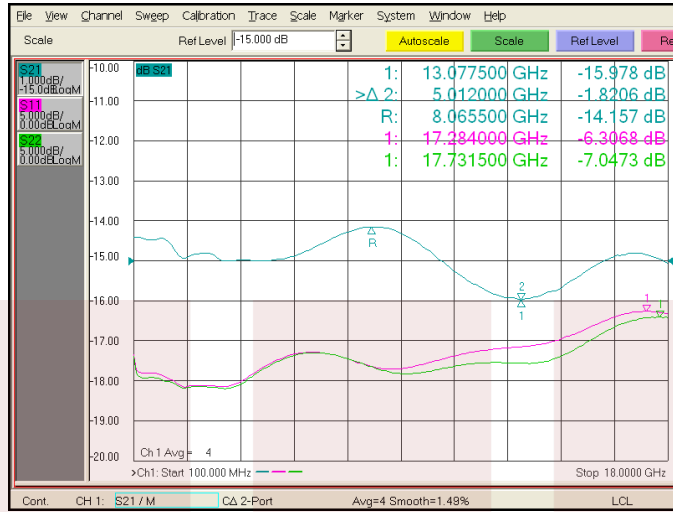
5dB Attenuation



10dB Attenuation



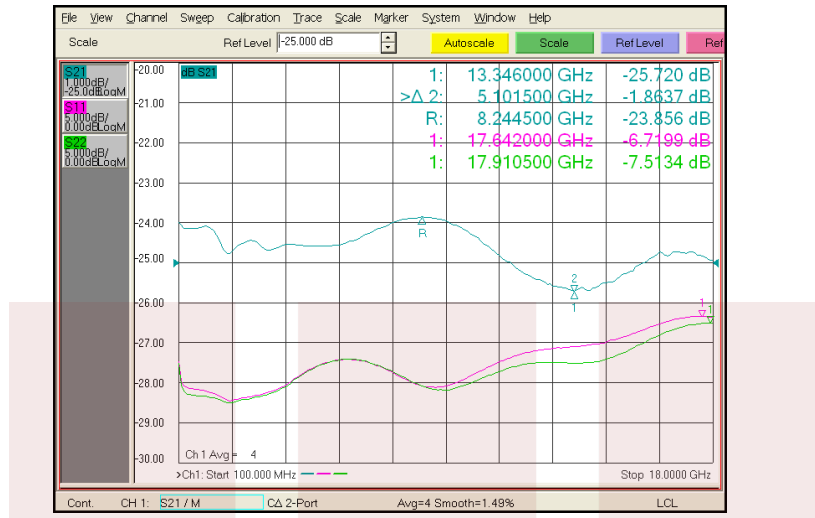
15dB Attenuation



20dB Attenuation



25dB Attenuation



30dB Attenuation

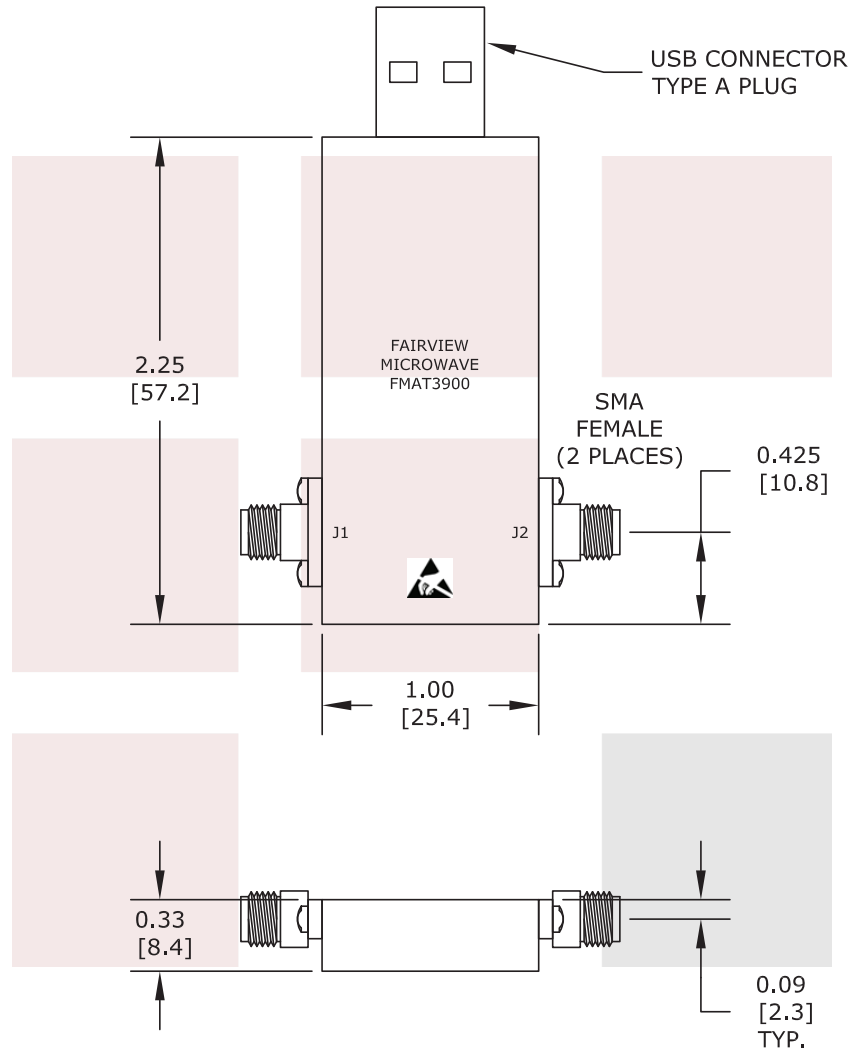


0 to 30 dB Programmable USB Controlled Step Attenuator With a 1 dB Step SMA Female To SMA Female From 100 MHz To 18 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [0 to 30 dB Programmable USB Controlled Step Attenuator With a 1 dB Step SMA Female To SMA Female From 100 MHz To 18 GHz FMAT3900](http://www.fairviewmicrowave.com/30-db-usb-controlled-step-attenuator-sma-female-fmat3900-p.aspx)

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TITLE 0 to 30 dB Programmable USB Controlled Step Attenuator With a 1 dB Step SMA Female To SMA Female From 100 MHz To 18 GHz		DWG NO FMAT3900		CAGE CODE 3FKR5	
CAD FILE	112414	SHEET	SCALE	N/A	SIZE A 150