

0 to 30 dB Programmable USB Controlled Step Attenuator With a 1 dB Step 2.92mm Female To 2.92mm Female From 100 MHz To 40 GHz

SDUA-400-030-0100-K 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 40 GHz. The Attenuator is controlled and powered via USB 2.0 with drivers 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		40	GHz
Mean Attenuation Range	0		30	dB
Input VSWR		2.5:1		
Output VSWR		2.5:1		
Power Rating			+23	dBm
Accuracy of Attenuation to 30 dB		±2.5		dB
Step Size	1			dB

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Freq. Range	0.1-20	20-40				GHz
Insertion Loss, Typ	5	8				dB

Mechanical Specifications

Size	
Length	2.25 in [57.15 mm]
Width	1 in [25.4 mm]
Height	0.33 in [8.38 mm]
Weight	0.0885 lbs [40.14 g]
Connector 1	2.92mm Female
Connector 2	2.92mm Female

Environmental Specifications

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Features:

- Programmable 30 dB Pin Diode Attenuator
- 0.1 GHz to 40 GHz Frequency Range
- 30 dB Attenuation Range
- Step Resolution of 1 dB
- Insertion Loss 5 dB Typ, 8 dB typ to 40 GHz
- 2.92mm Female Input/Output connectors

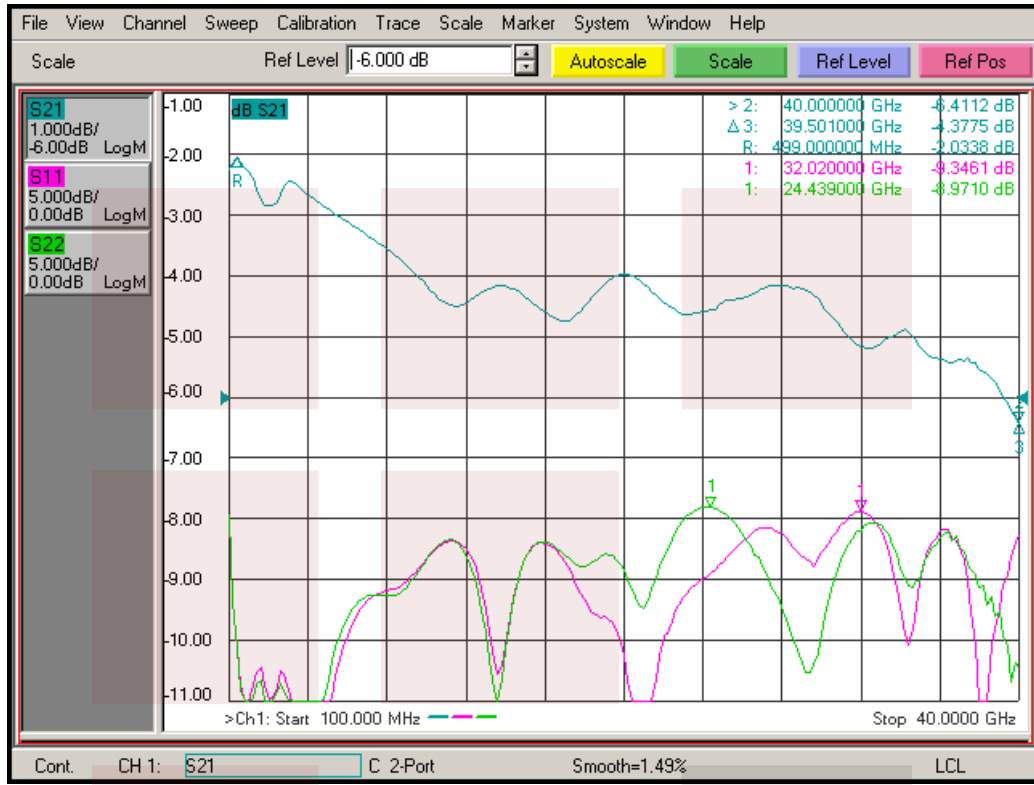
Applications:

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

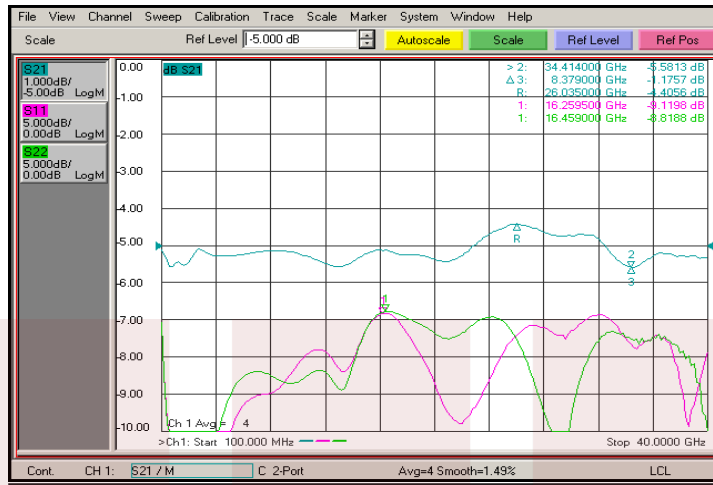
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Typical Performance Data

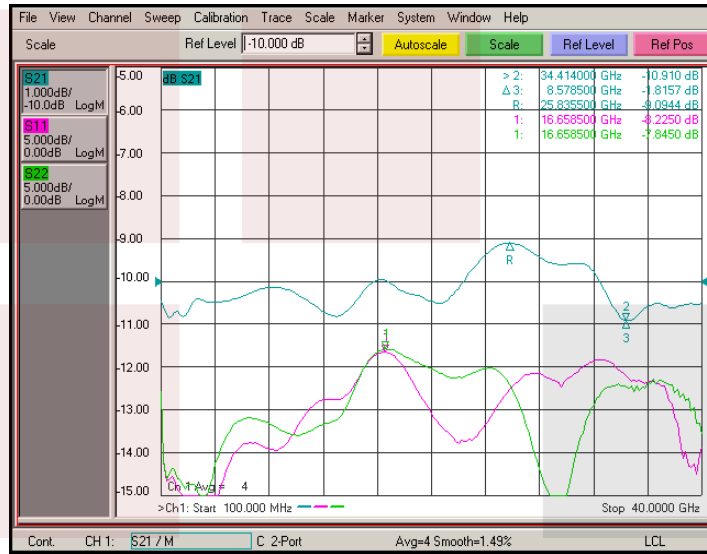
Insertion Loss & Return Loss



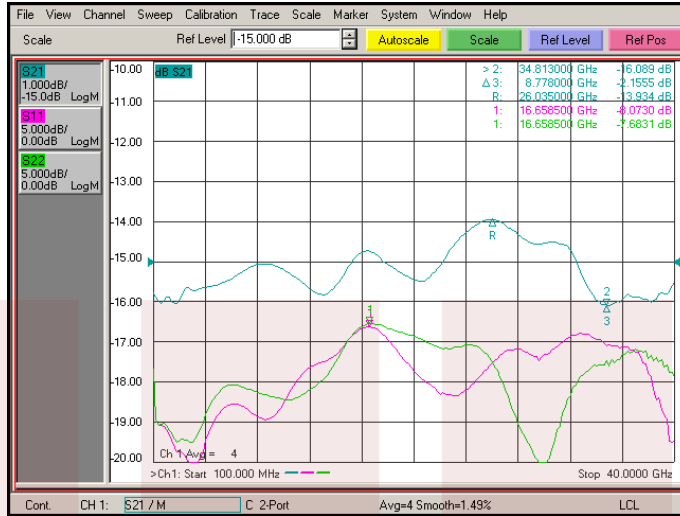
5dB Attenuation



10dB Attenuation



15dB Attenuation



20dB Attenuation



25dB Attenuation



30dB Attenuation

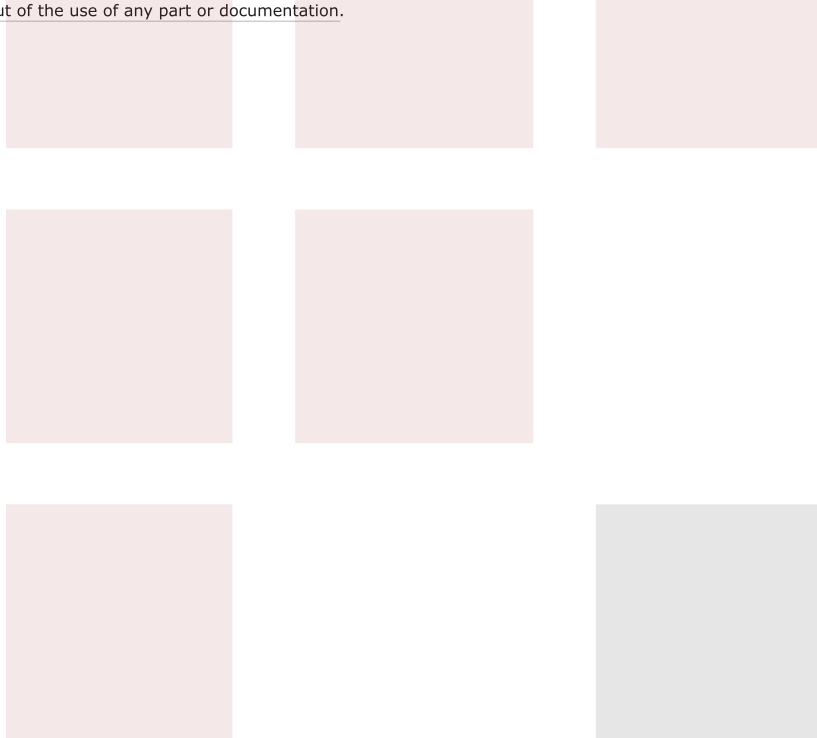


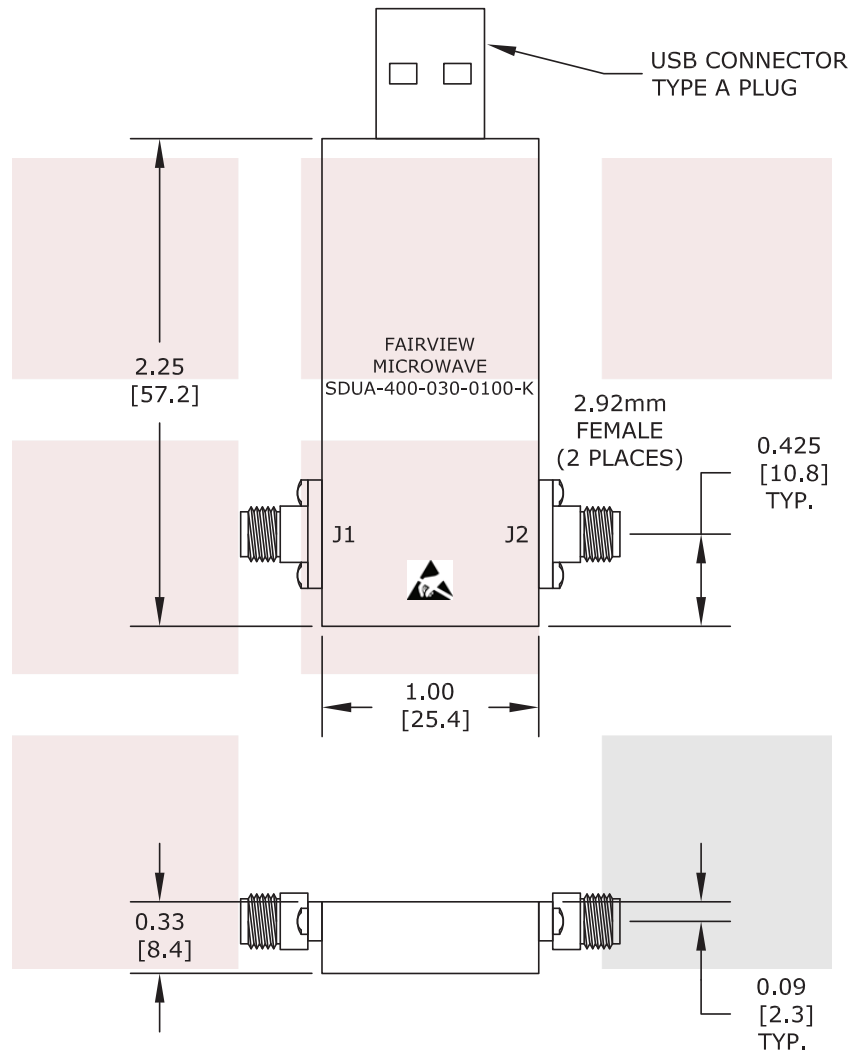
0 to 30 dB Programmable USB Controlled Step Attenuator With a 1 dB Step 2.92mm Female To 2.92mm Female From 100 MHz To 40 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, 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 2.92mm Female To 2.92mm Female From 100 MHz To 40 GHz SDUA-400-030-0100-K](#)

URL: <https://www.fairviewmicrowave.com/30-db-usb-controlled-step-attenuator-2.92mm-female-sd-ua-400-030-0100-k-p.aspx>

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NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE
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DWG NO	SDUA-400-030-0100-K	CAGE CODE	3FKR5		
CAD FILE	101714	SHEET	SCALE	N/A	SIZE
				A	150