AT11V VARIABLE ATTENUATOR

Features

- Excellent Flat Response
- Passes L1/L2 GPS and GNSS Frequencies
- External Manual Potentiometer
- RoHS, REACH, and WEEE Compliant

Options

- Pass DC or DC Blocked
- Variable Attenuation and Output Voltage Options
- Multiple Power and Connector Options

Description

Designed with the thin link margins of satellite navigation systems in mind, the AT11V variable attenuator covers the L1/L2 GPS, and GNSS frequencies. The AT11V GPS variable attenuator is a one input, one output RF device. The most common use is to vary the input level to a GPS receiver or a GPS test set controlled via a potentiometer with an external knob. AT11V Variable Attenuator provides a range of attenuation from 0 to 40dB. The AT11V also includes the option to pass the receive antenna LNA DC bias voltage through the device or to block the DC path to the antenna.

The AT11V variable attenuator comes with a variety of options to meet your specific needs. Please call, email sales@gpssource.com, or visit our website www.gpssource.com for further information on product options & specifications.

Electrical Specifications Operating Temperature -40 to 850C

Parameter		Conditions	Min	Typical	Max	Units
Freq. Range		IN – OUT, IN/OUT-50Ω	1.1		1.7	GHz
In/Out Imped.		IN, OUT		50		Ω
Attenuation(1)		IN – OUT, IN/OUT-50Ω	-2	As Specified	-40(3)	dB
Input SWR		OUT Port - 50Ω			1:5:1	-
Output SWR		IN Port - 50Ω			1:5:1	-
Gain Flatness		|L1 – L2|, IN – OUT, IN/OUT-50Ω			2	dB
Inline Voltage	Pass DC	Non-powered configuration pass DC input on output (OUT) and input (IN)	7(1)		32	VDC
	Powered	Out 1 Pass DC	3		16	VDC
Device Current		Current consumption of device, excludes antenna current			16(2)	mA
Max RF Input		Max RF input without damage			10	dBm

Notes:

1. DC IN for powered option must be 2V greater than desired DC voltage out.
2. Maximum combined DC current draw out all ports of the device is a function of the DC input voltage and desired DC output voltage , according to the following:

   $$Iout \leq 1.4 / (V_{DC\ IN} - V_{DC\ OUT}) - 0.007 \quad Amps$$

   For powered option with a wall mount transformer (Voltage Input = 110/220/240 VAC), $V_{DC\ IN}$ is 9V.

3. The SWR specification is not met for attenuation greater than 30dB.

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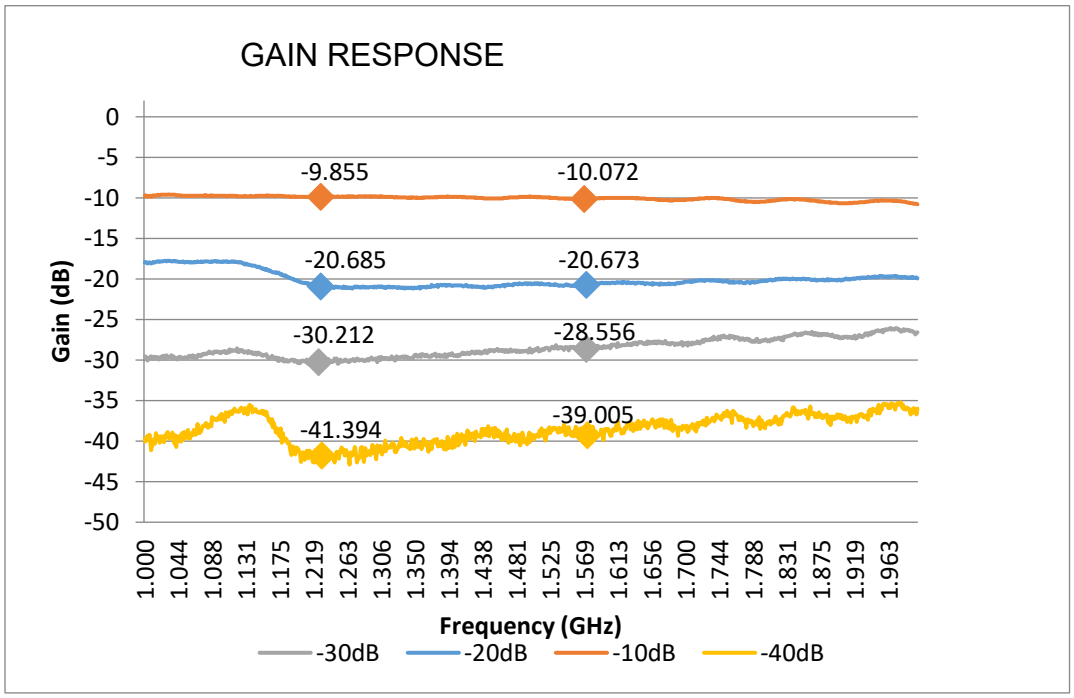
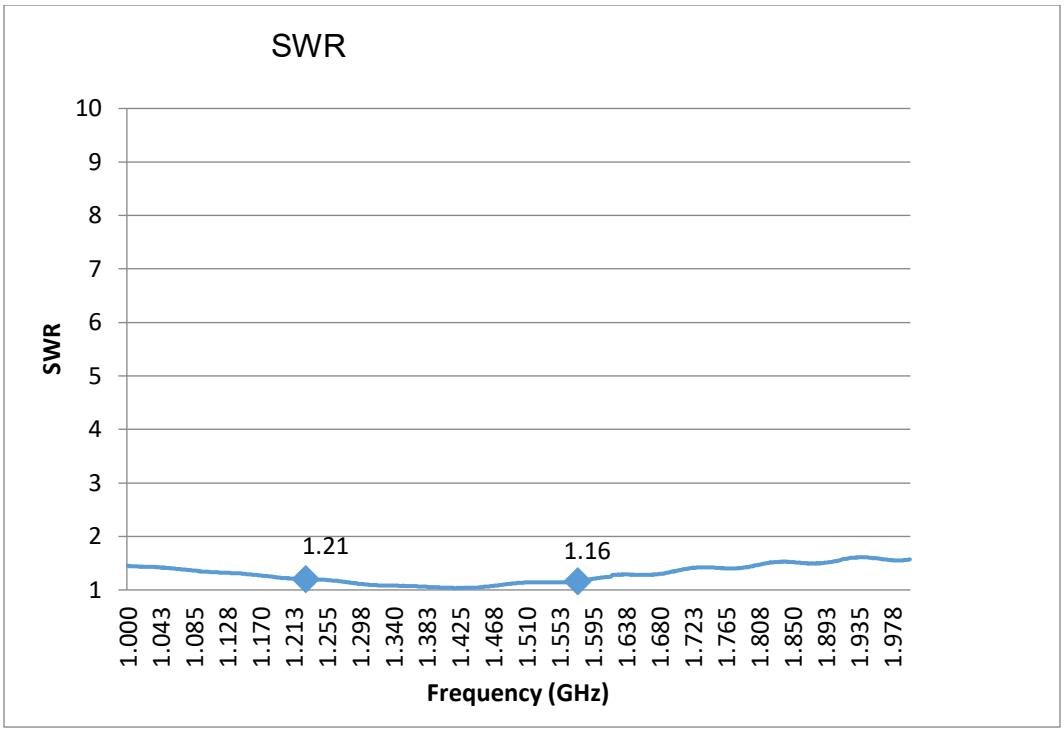
4. Performance Data:





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Available Options:

Power Supply Options:		
Source Voltage Options	**Voltage Input**	**Type**
	110 VAC	Wall Mount Transformer
	230 VAC (Euro)	Wall Mount Transformer
	240 VAC (U.K.)	Wall Mount Transformer
	DC 5-28 VDC	Military Style Connector or Tinned Leads
Output Voltage Options(1)	**DC Voltage Out**	
	3.3	
	5	
	7.5	
	9	
	12	
	Blocked DC	
RF Connector Options:		
Connector Options	**Connector Type**	**Limitations**
	N (Male & Female)	
	SMA (Male & Female)	
	TNC (Male & Female)	
Housing Options:		
Housings	**Housing Type**	**Limitations**
	Standard	None
Port Options:		
Pass DC(1)	Input Output Pass DC	
DC Blocked(1)	Output Blocks DC	

Notes:

1. With powered option, any or all RF ports (input or output) can be DC blocked or can pass the powered DC voltage

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Part Number Configurator:

AT11V – P110 / 5 – SF

Product:
Variable Attenuator,
Standard Housing

Source Voltage:
P110 – Transformer
P230 – Transformer (230 Euro)
P240 – Transformer (240 U.K.)
PM – Military Connector (User supplies DC)
PMS-1275 – Military DC Connector
(User supplies DC and 1275B Compliant)
PMS-704 – Military DC Connector
(User supplies DC and 704F Compliant)

Connector Options:

NM	=	N, Male
NF	=	N, Female
SM	=	SMA, Male
SF	=	SMA, Female
TM	=	TNC, Male
TF	=	TNC, Female

Output Voltage:

3.3	=	3.3V
5	=	5V
7.5	=	7.5V
9	=	9V
12	=	12V
BDC	=	Blocked DC

For help in creating the part number to meet your exact needs, contact us at sales@gpssource.com or visit our website at www.gpssource.com.

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