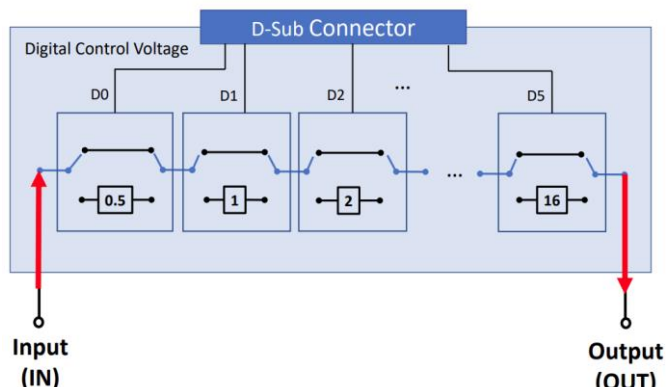




RoHS Compliant



Electrical Schematic

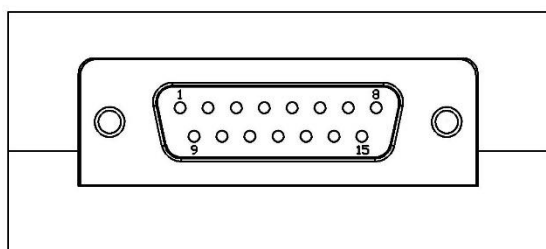
### Electrical Specifications

Parameter	Unit	Frequency (MHz)	Conditions	Min.	Typ.	Max.	
Attenuation Range	dB	10 - 30000		0		31.5	
Step	dB				0.5		
Insertion Loss	dB		@ 0 dB Att.		5.4	5.6	
Attenuation Accuracy	dB	10 - 12000	@ 0.5 - 15 dB Att.	$\pm (0.2 + 1\% \text{ of State (max.)})$			
		12000 - 30000	@ 16 - 31.5 dB Att.	$\pm (0.2 + 3\% \text{ of State (max.)})$			
		10 - 12000	@ 0.5 - 15 dB Att.	$\pm (0.2 + 2\% \text{ of State (max.)})$			
		12000 - 30000	@ 16 - 31.5 dB Att.	$\pm (0.2 + 4\% \text{ of State (max.)})$			
Input Operating Power (RF In and RF Out ports)	dBm	10 - 30000				27	
IP3 Input	dBm				48		
VSWR	:1		@ 0 dB Atn.	Input		1.43	1.60
				Output		1.35	
Switching Speed	us			10% to 90% RF Output		1.3	
			50% Control to 90% RF Output		3.24		

Supply Voltage Range ( $V_{DD}$ )	V			3.15		3.45
Control Voltage	V		Low	-0.3		0.3
			High	$V_{DD}-0.3$		$V_{DD}+0.3$
Digital Control Voltage Range	V			0		$V_{DD}+0.3$
Supply Current ( $I_{DD}$ )	mA				0.3	

Operated in 50Ω system, 25°C environment.

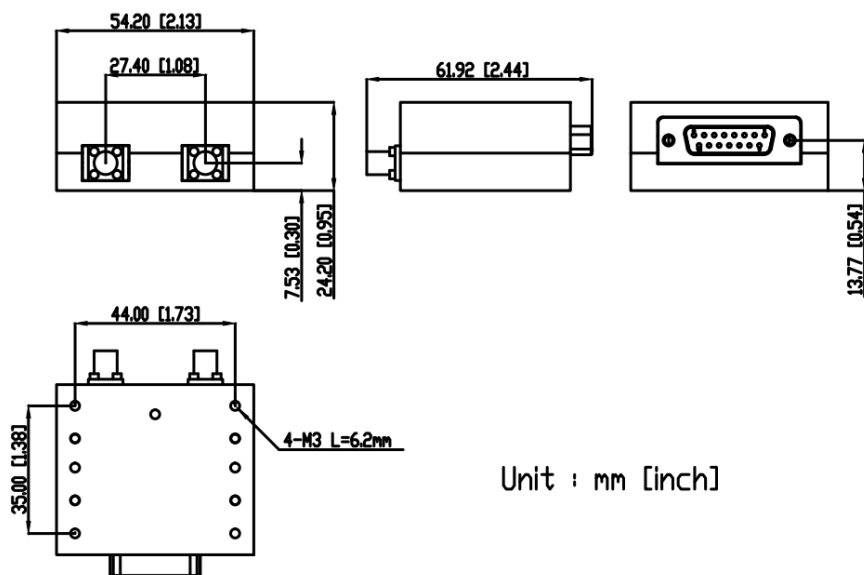
Digital Control Input						Attenuation State (dB)
D0	D1	D2	D3	D4	D5	
Low	Low	Low	Low	Low	Low	0 (reference)
<b>High</b>	Low	Low	Low	Low	Low	0.5
Low	<b>High</b>	Low	Low	Low	Low	1
Low	Low	<b>High</b>	Low	Low	Low	2
Low	Low	Low	<b>High</b>	Low	Low	4
Low	Low	Low	Low	<b>High</b>	Low	8
Low	Low	Low	Low	Low	<b>High</b>	16
<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	31.5



### Pin Number Functions

<b>No.</b>	15	14	13	12	11
<b>Func.</b>	N/C	D5	D4	D3	D2
<b>No.</b>	10	9	8	7	6
<b>Func.</b>	D1	D0	$V_{DD}$	N/C	N/C
<b>No.</b>	5	4	3	2	1
<b>Func.</b>	N/C	PS(0V)	GND	N/C	N/C

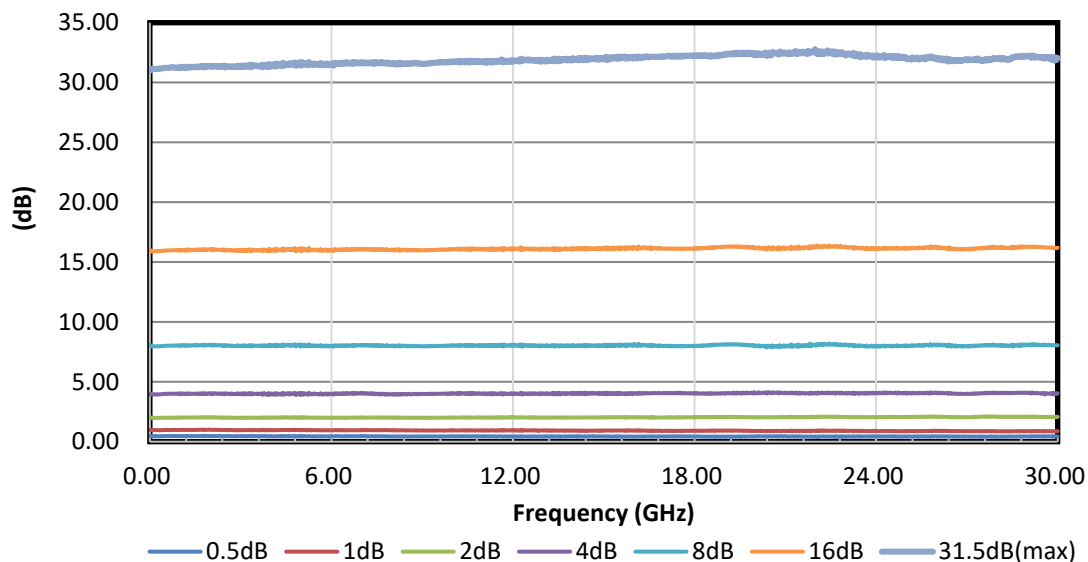
### Outline Drawing



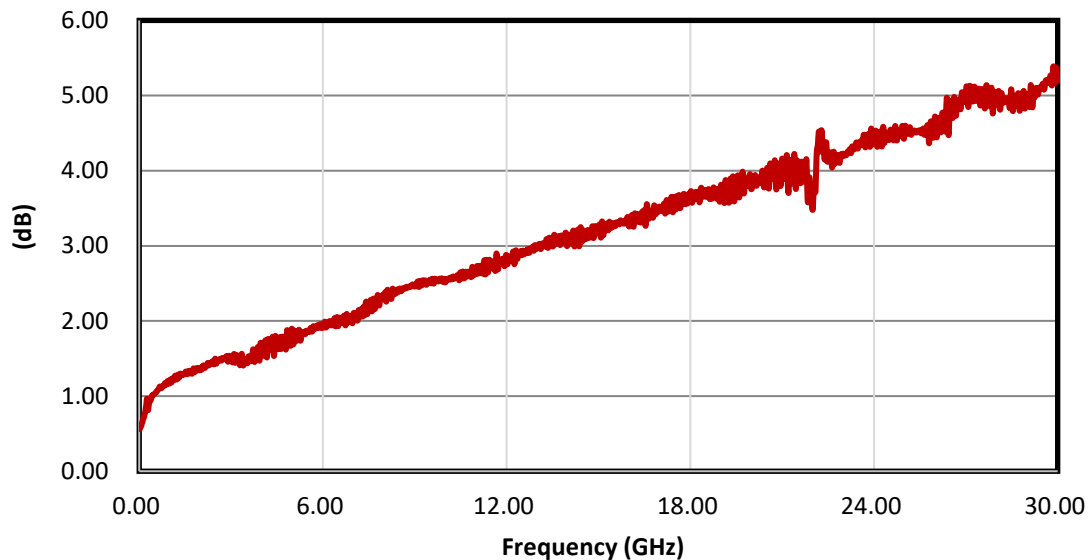
Unit : mm [inch]

Connectors: 2.92mm Female, D-Sub Male

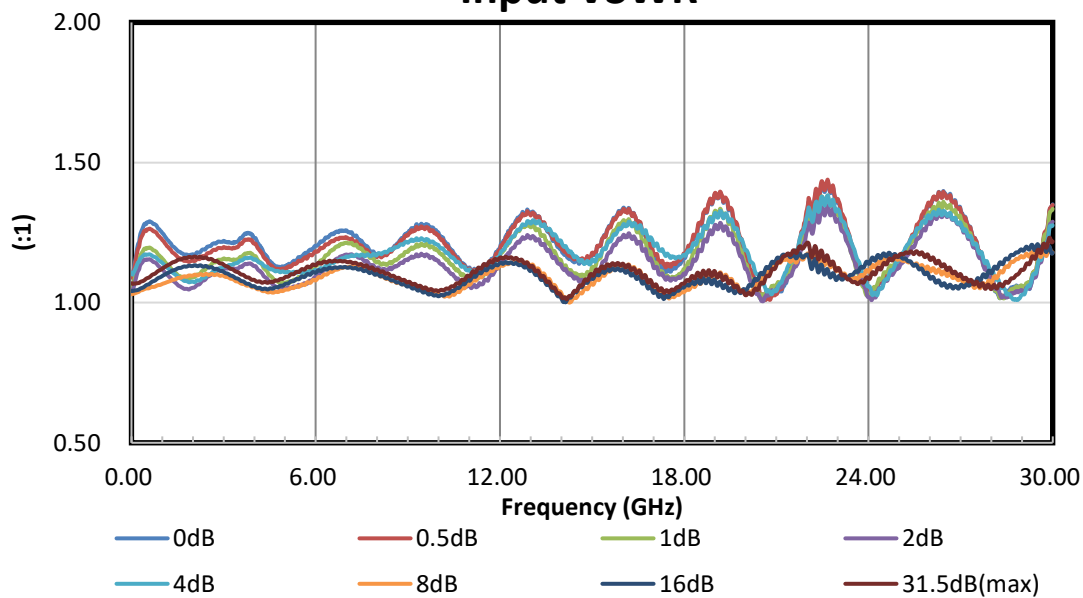
### Attenuation Relative to Insertion Loss



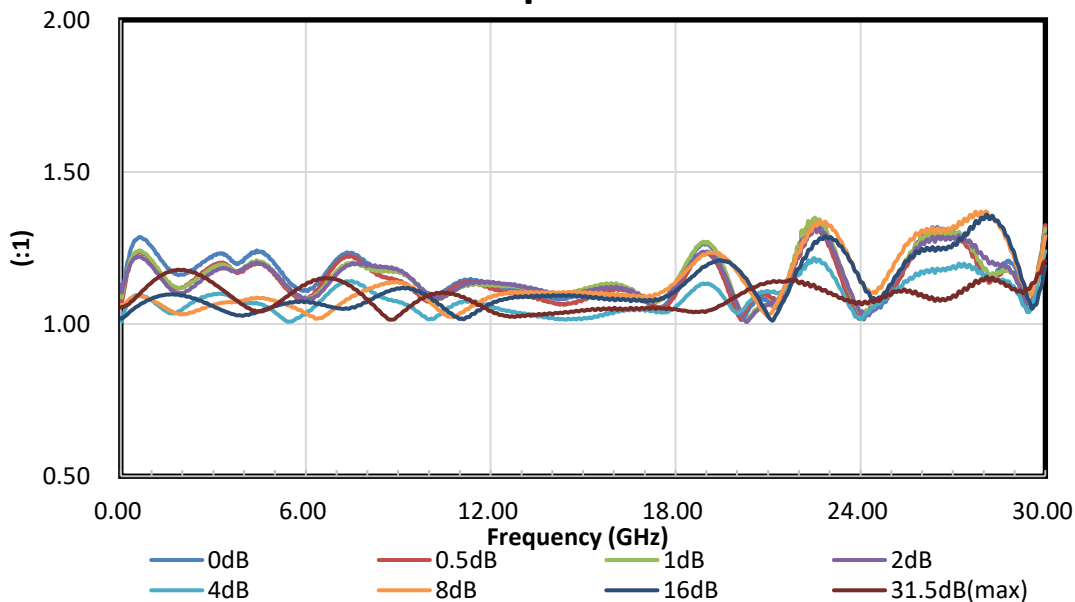
### Insertion Loss



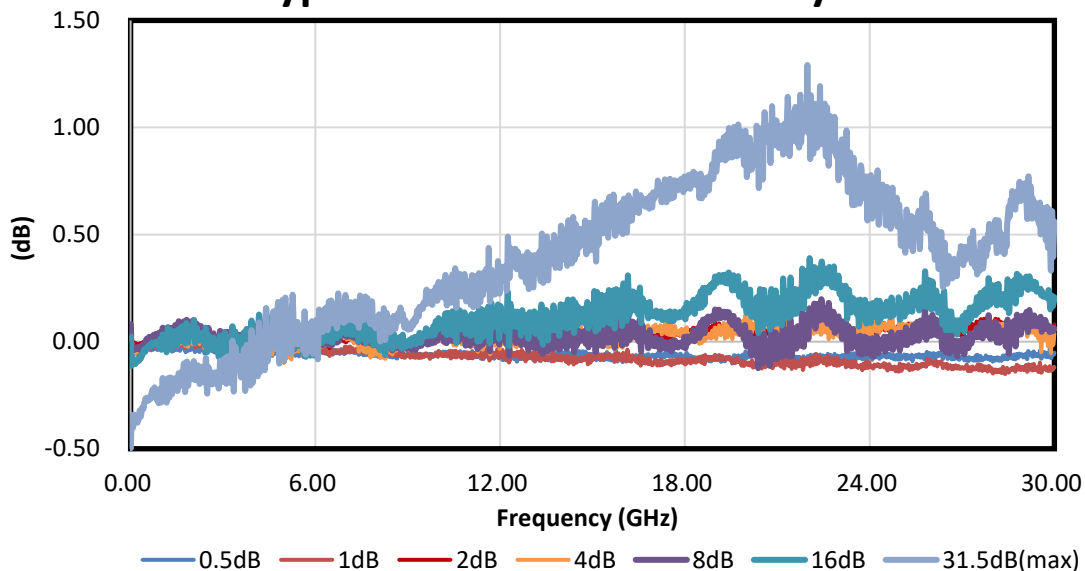
### Input VSWR



### Output VSWR



### Typical Attenuation Accuracy



Typical performance S-parameter file: <https://www.amtery.com/en/goods-86>

For each S/N S-parameter file, go to <https://www.amtery.com/en/downloads>

Note: Specifications are subject to change without notice.