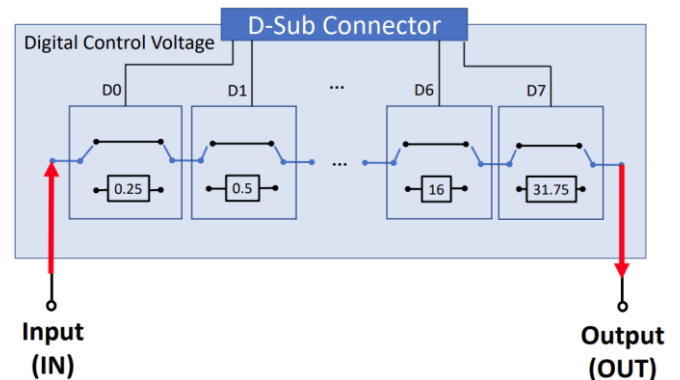




RoHS Compliant



Electrical Schematic

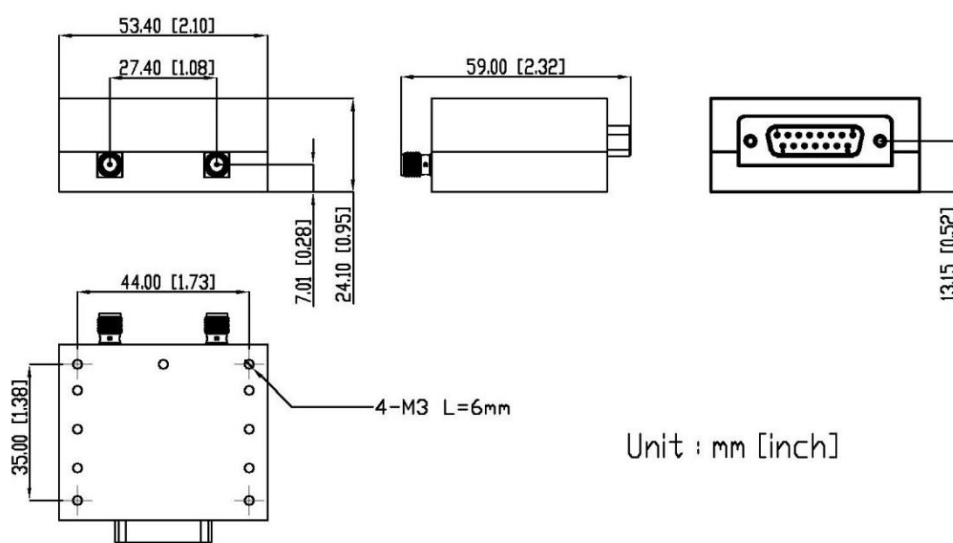
### Electrical Specifications

Parameter	Unit	Frequency (MHz)	Conditions	Min.	Typ.	Max.	
Attenuation Range	dB	200 - 6000		0		63.5	
Step	dB				0.25		
Insertion Loss	dB			@ 0 dB Atn.		5.5	5.7
Attenuation Accuracy	dB			@ 0.25 dB Atn.		±0.03	±0.04
				@ 0.5, 1, 2 dB Atn.		±0.07	±0.13
				@ 4, 8, 16 dB Atn.		±0.27	±0.32
				@ 31.75 dB Atn.		±0.74	±1.00
				@ 63.5 dB Atn.		±3.30	±3.50
Input Operating Power (RF In and RF Out ports)	dBm						24
IP3 Input	dBm					47	
VSWR	:1			@ 0 dB Atn.	Input	1.93	1.94
					Output	1.74	
Switching Speed	ns			10% to 90% RF Output		90	
				50% Control to 90% RF Output		205	
Supply Voltage Range (V <sub>DD</sub> )	V				3		5.4
Control Voltage Threshold	V		Low	V <sub>DD</sub> = 3.3 V	0		0.5
				V <sub>DD</sub> = 5 V	0		0.8
			High	V <sub>DD</sub> = 3.3 V	2		3.3
				V <sub>DD</sub> = 5 V	3.5		5

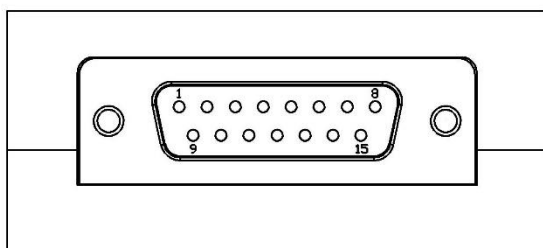
<b>Digital Control Voltage Range</b>	V			0		$V_{DD}$
<b>Supply Current (<math>I_{DD}</math>)</b>	mA			$V_{DD} = 3.3\text{ V}$	0.6	
				$V_{DD} = 5\text{ V}$	1.2	

Operated in 50Ω system, 25°C environment.

### Outline Drawing



Connectors: SMA Female, D-Sub Male

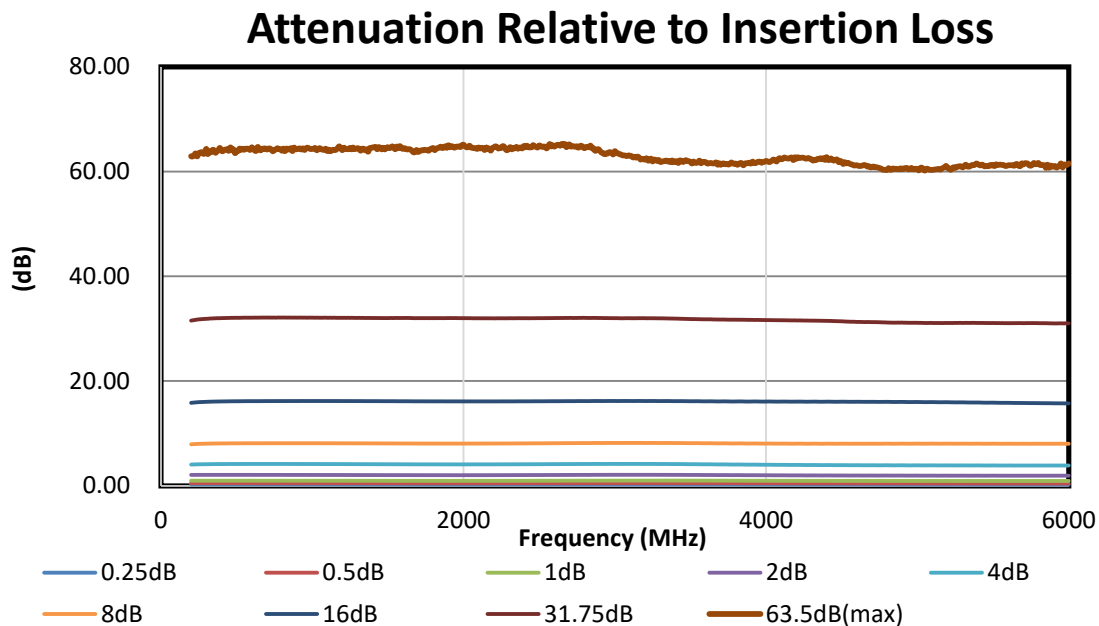


### Pin Number Functions

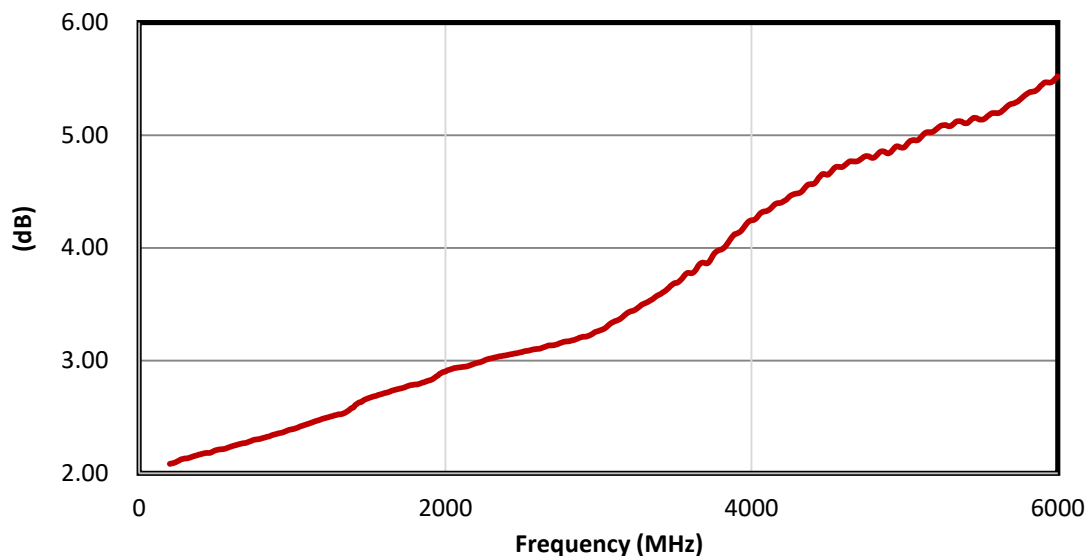
<b>No.</b>	15	14	13	12	11
<b>Func.</b>	D0	D1	D2	D3	D4
<b>No.</b>	10	9	8	7	6
<b>Func.</b>	D5	D6	$V_{DD}$	N/C	PS(0V)
<b>No.</b>	5	4	3	2	1
<b>Func.</b>	N/C	N/C	GND	N/C	D7

Digital Control Input								Attenuation State (dB)
D0	D1	D2	D3	D4	D5	D6	D7	
Low	Low	Low	Low	Low	Low	Low	Low	0 (reference)
<b>High</b>	Low	Low	Low	Low	Low	Low	Low	0.25
Low	<b>High</b>	Low	Low	Low	Low	Low	Low	0.5
Low	Low	<b>High</b>	Low	Low	Low	Low	Low	1
Low	Low	Low	<b>High</b>	Low	Low	Low	Low	2
Low	Low	Low	Low	<b>High</b>	Low	Low	Low	4
Low	Low	Low	Low	Low	<b>High</b>	Low	Low	8
Low	Low	Low	Low	Low	Low	<b>High</b>	Low	16
Low	Low	Low	Low	Low	Low	Low	<b>High</b>	31.75
<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	63.5

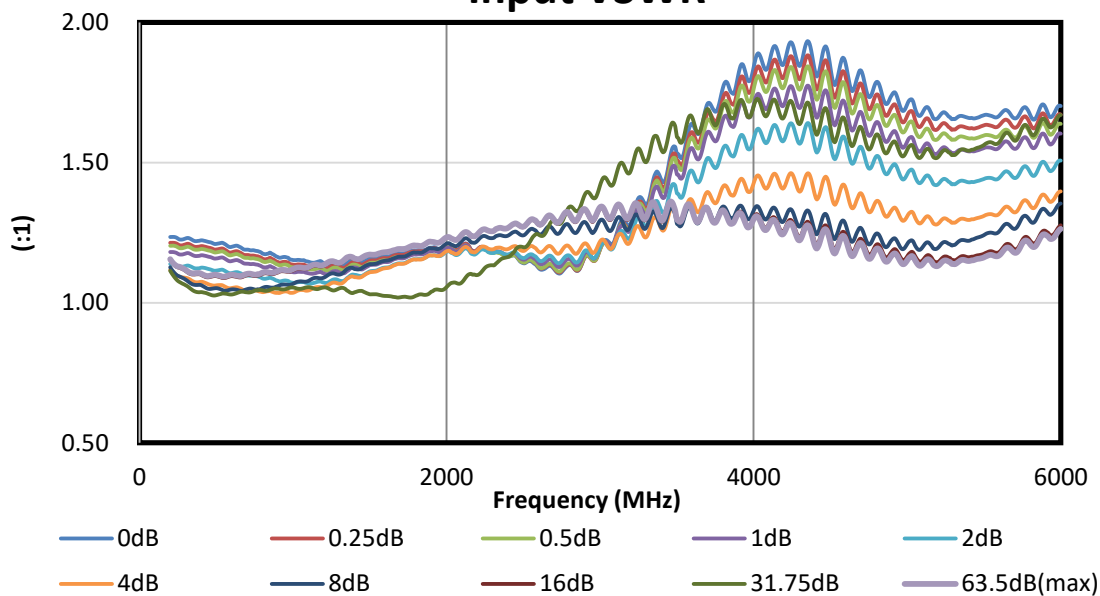
### Typical Performance



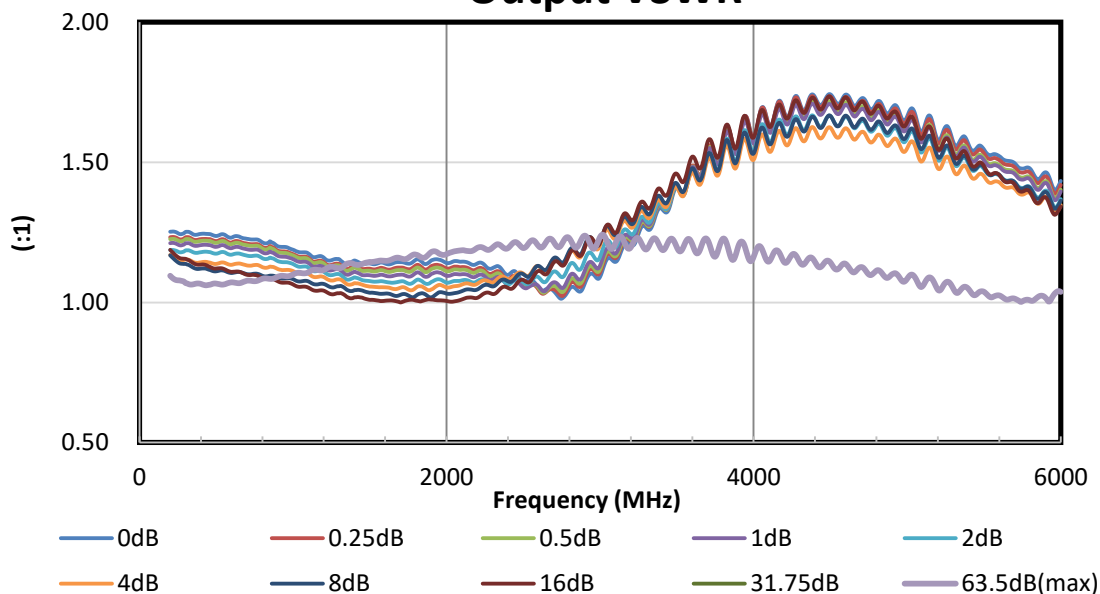
### Insertion Loss



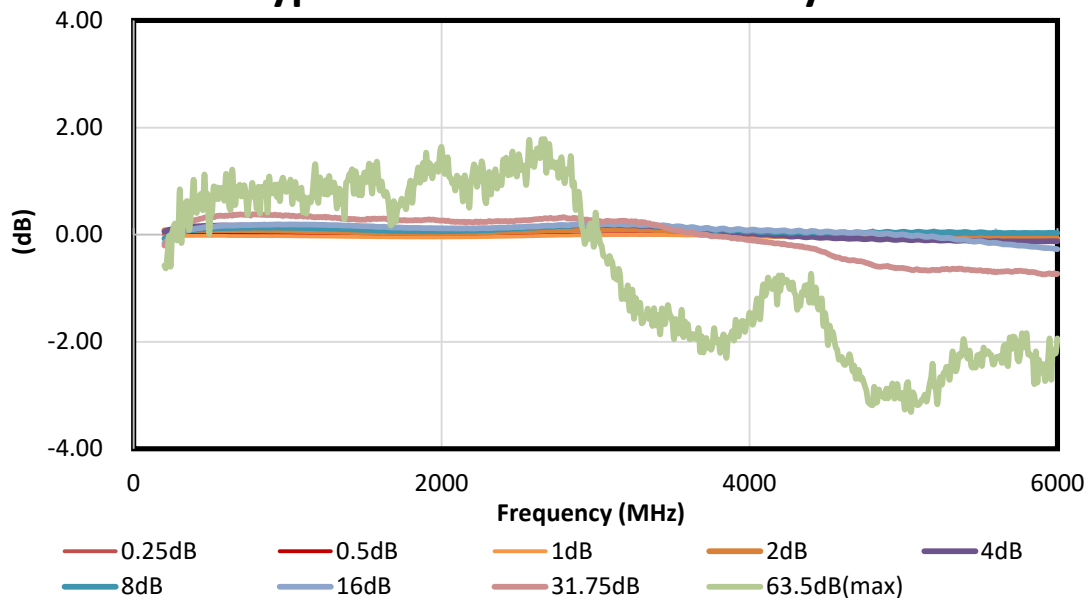
### Input VSWR



### Output VSWR



### Typical Attenuation Accuracy



Typical performance S-parameter file: <https://www.amtery.com/en/goods-80>

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

Note: Specifications are subject to change without notice.