

Voltage Controlled Attenuator

0.2-3GHz/30dB Attenuation Range

Model: TLVA0.2G3G-30-5

The TLVA0.2G3G-30-5 is an broadband voltage controlled electrical attenuator operating from 0.2 to 3 GHz. The attenuator exhibits 3 dB typical insertion loss and 0 to 30 dB nominal attenuation range across the frequency range of 0.2 to 3 GHz while applying 0 to +5 V DC control voltage. The RF input and output ports are female SMA coax connectors.

Features:

- Ultra Wide Band: 0.2-3GHz
- Attenuation Range: 30 dB Typ
- Insertion Loss: 3dB Typ
- High Attenuator Accuracy

Applications:

- Radar Systems
- Communication Systems
- Testing Equipment

Electrical Characteristics:

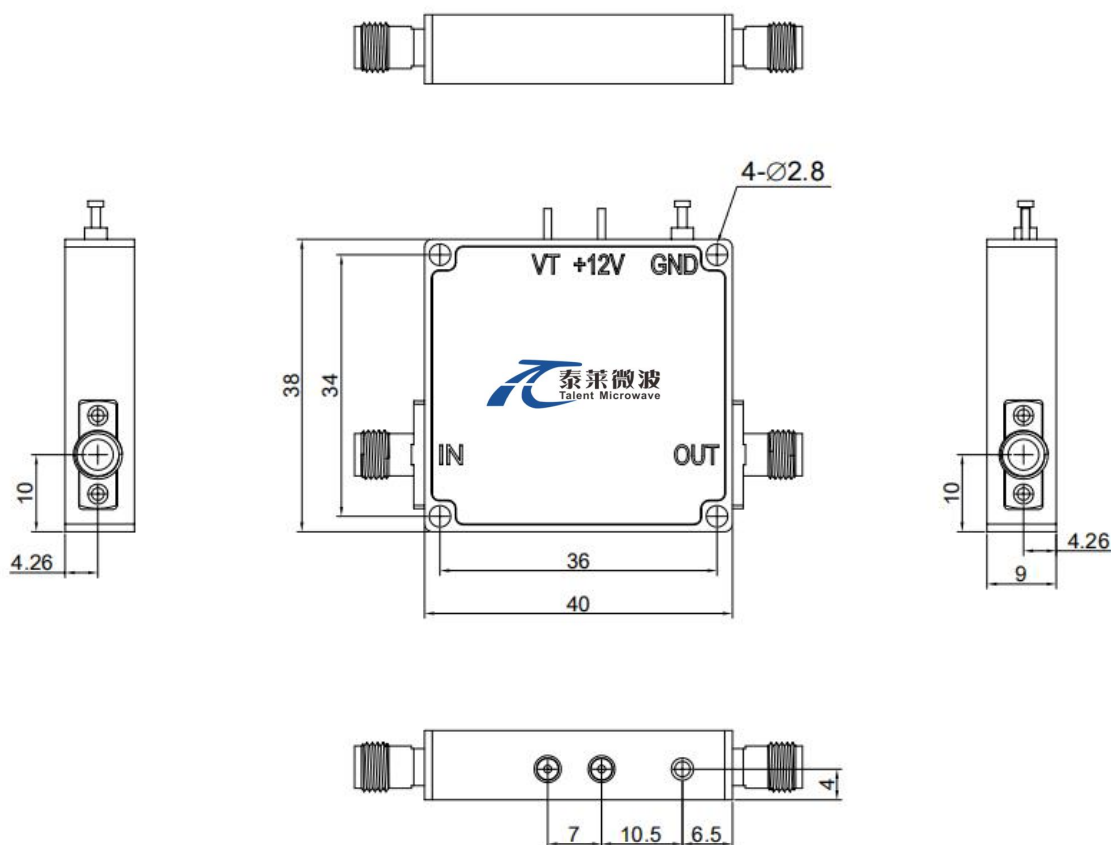
Parameter	Min	Typ	Max	Units
Frequency range	0.2-3			GHz
Insertion Loss		3	4.5	dB
Attenuation Range		30		dB
Input VSWR		1.4		:1
Output VSWR		1.4		:1
Input Max Power		30		dBm
DC Voltage		12		V DC
Control Voltage	0		5	V DC
Impedance	50			Ohms

Mechanical Specifications:

Description	Parameter	Units
Input /Output Connector	SMA Female/SMA Female	
Control Connector	Pin	
Size	40*38*9	mm

Description	Parameter	Units
Supply Bias Voltage	+15V	
RF Input Power	30 dBm	
ESD sensitivity (HBM)	Class 0, passed 150V	

Unit:mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

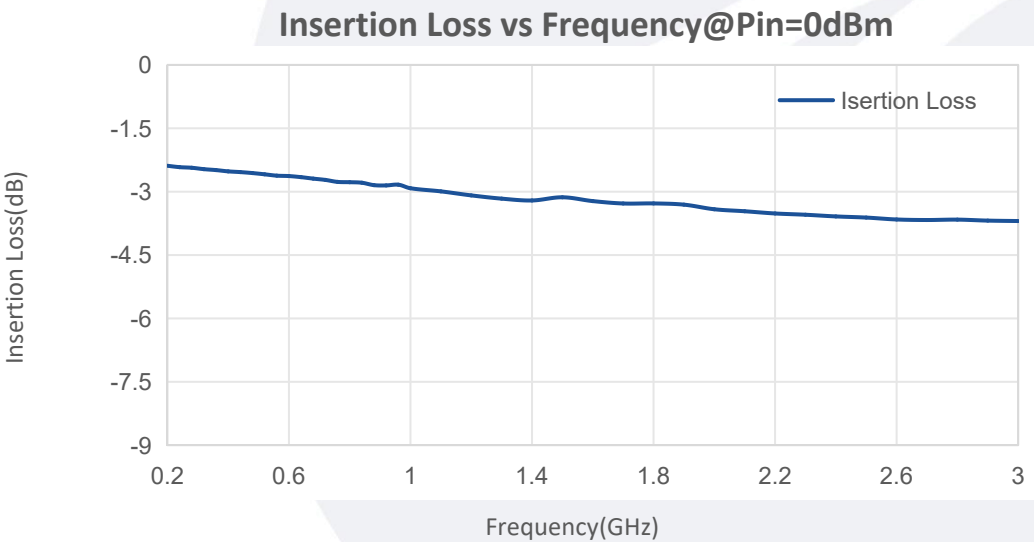
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+55	°C
Non-operating Temperature	-25		+65	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLVA0.2G3G-30-5	Voltage Controlled Attenuator 0.2-3 GHz, 30 dB Range,SMA Female	Rev.1.1

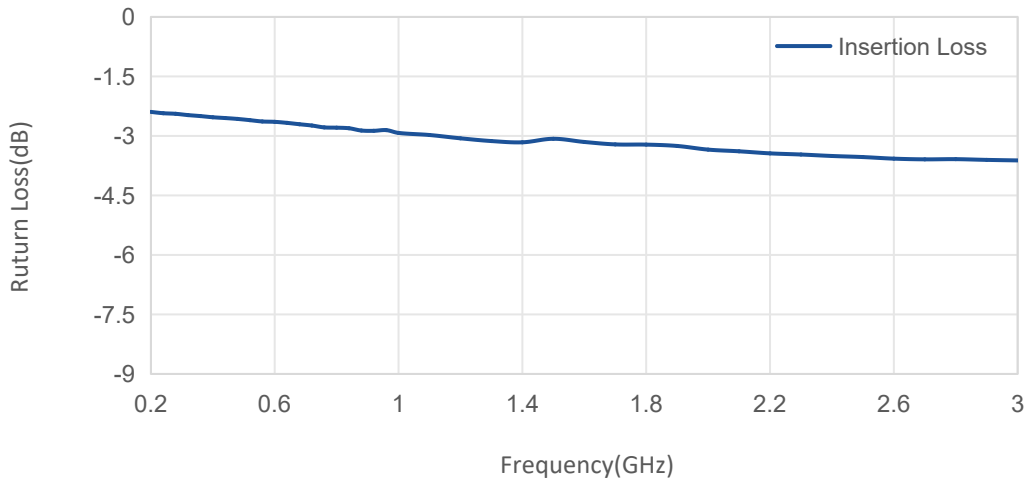
Typical Performance Data:



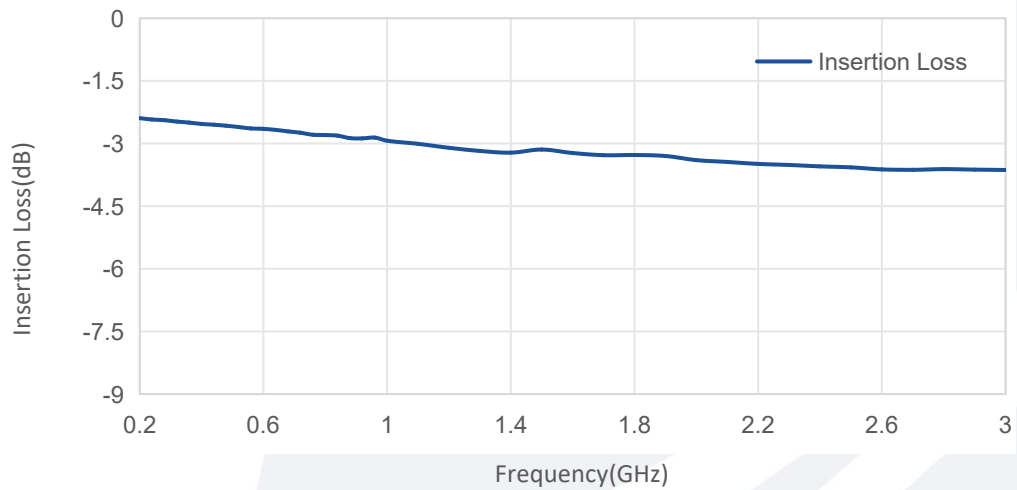
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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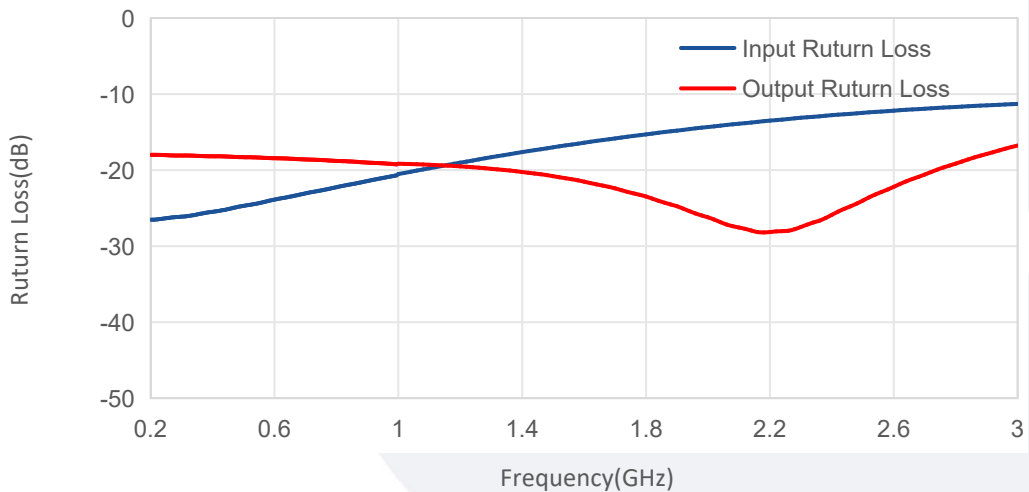
Insertion Loss vs Frequency@Pin=5dBm



Insertion Loss vs Frequency@Pin=10dBm



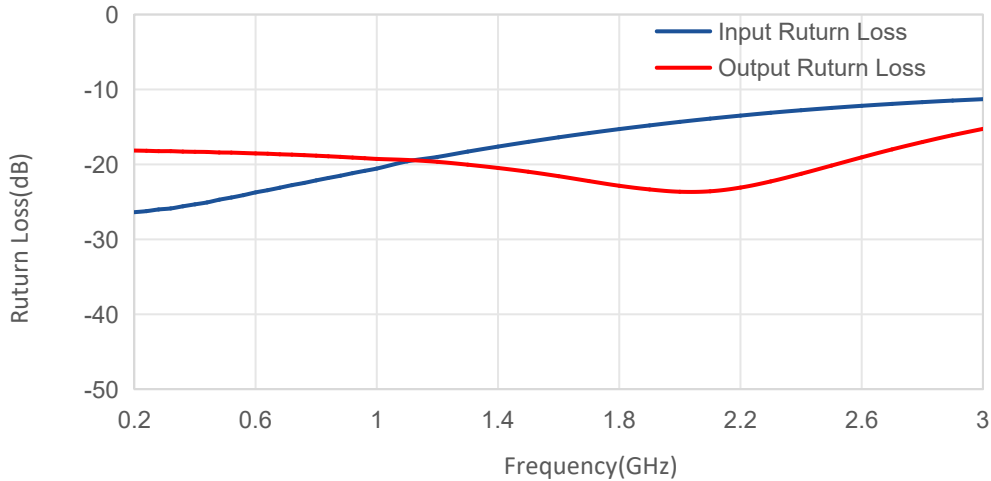
Return Loss vs Frequency@Pin=0dBm



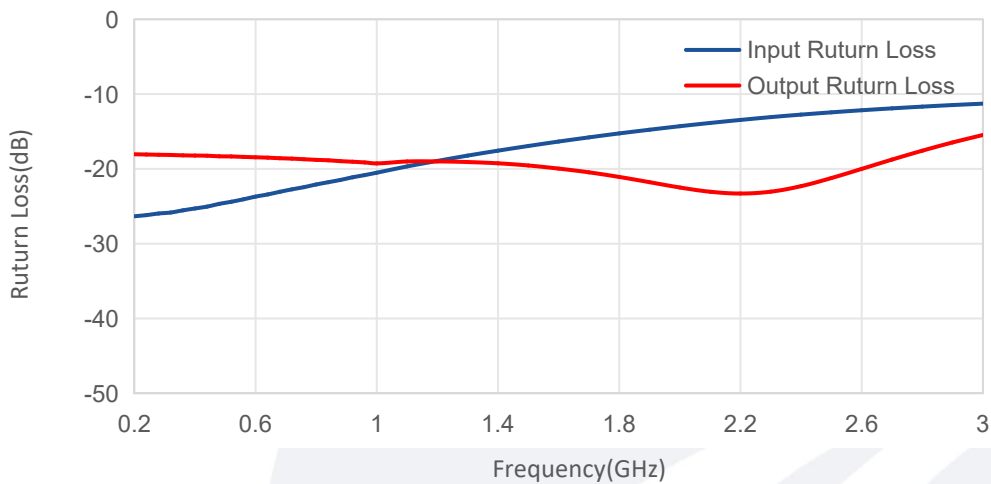
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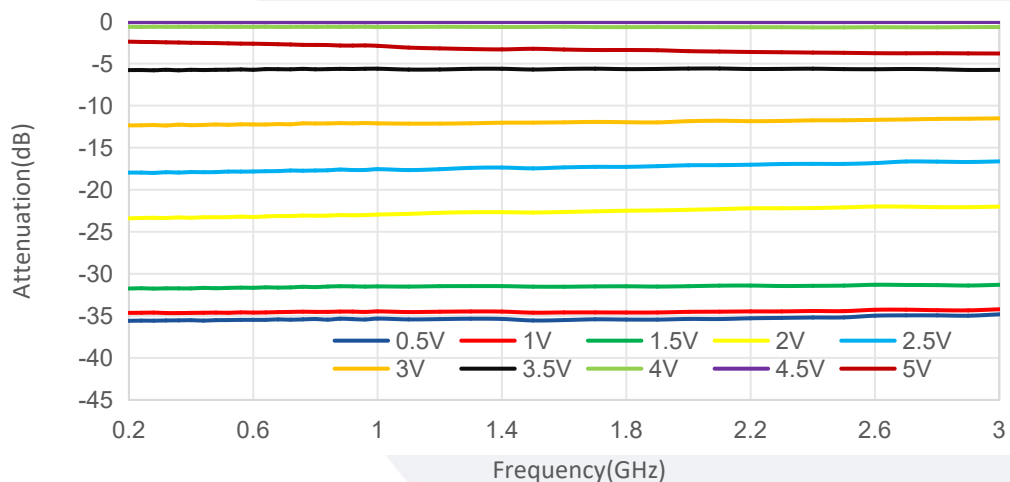
Return Loss vs Frequency@Pin=5dBm



Return Loss vs Frequency@Pin=10dBm



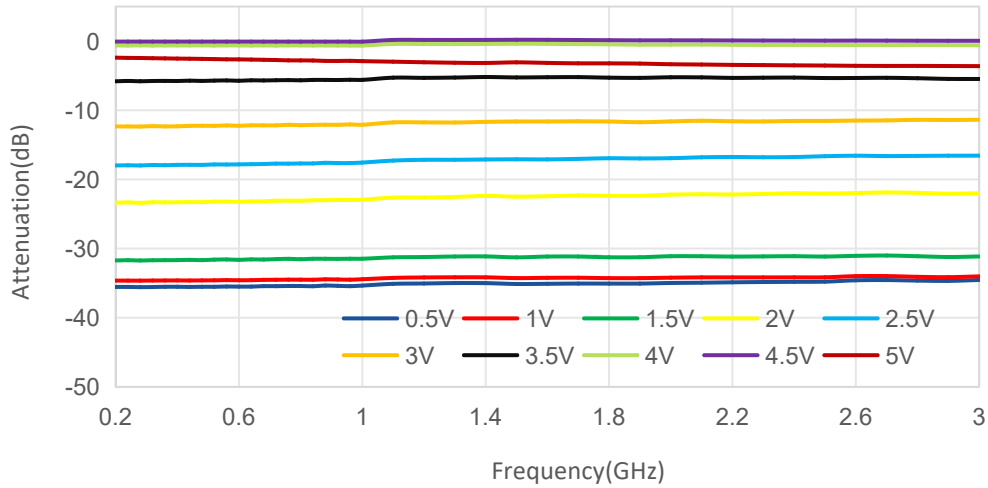
Attenuation@Voltage Pin=0dBm



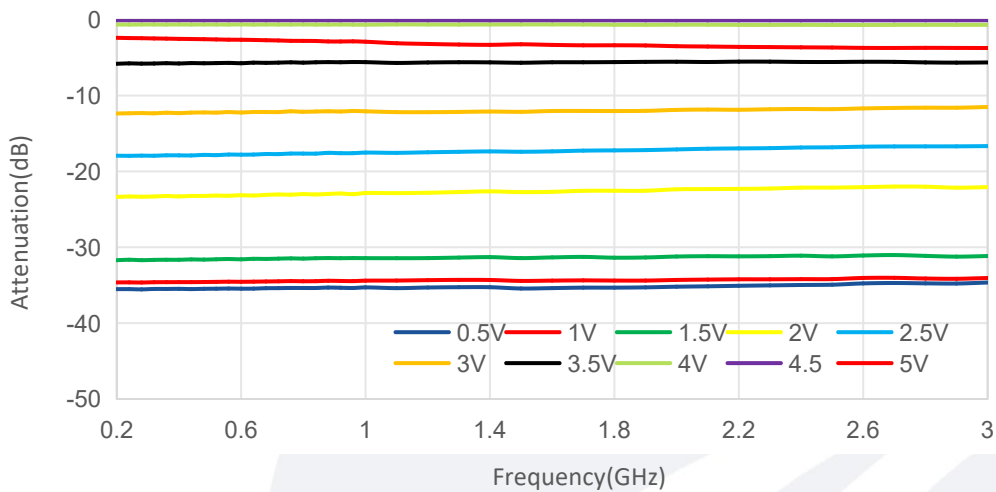
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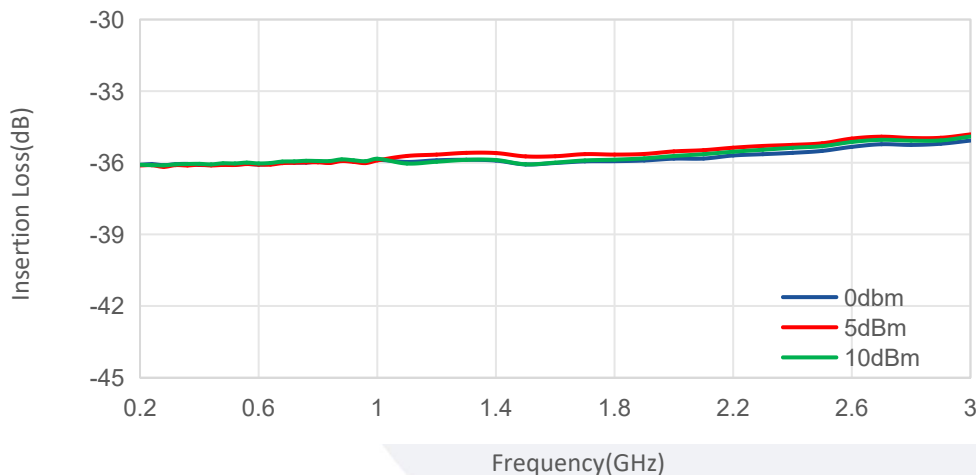
Attenuation@Voltage Pin=5dBm



Attenuation@Voltage Pin=10dBm



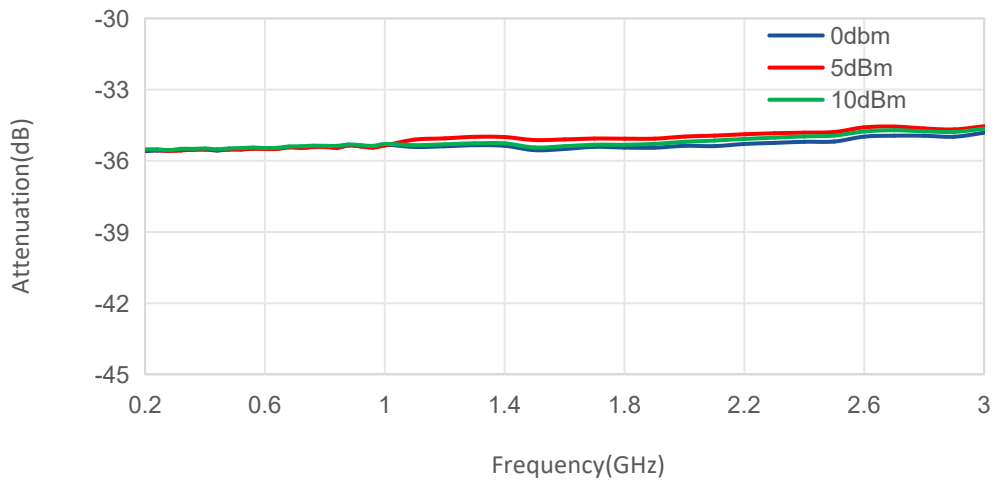
Attenuation@Pin VT=0V



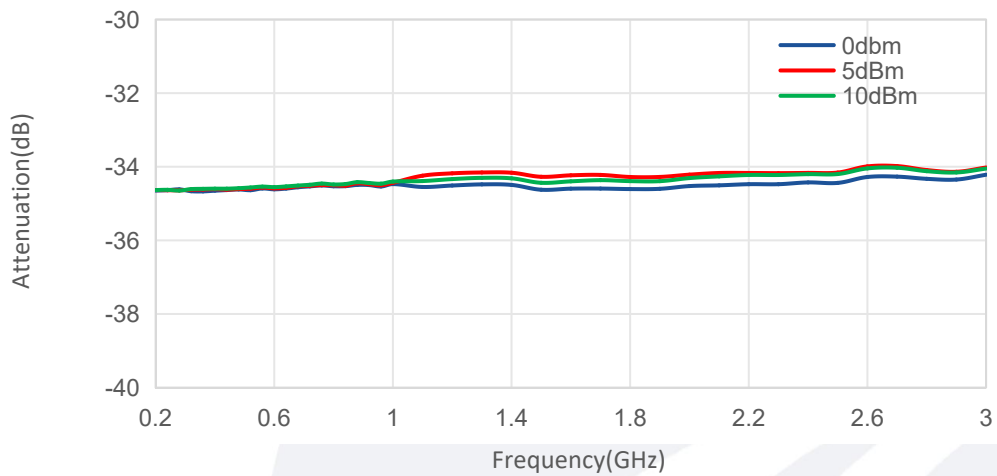
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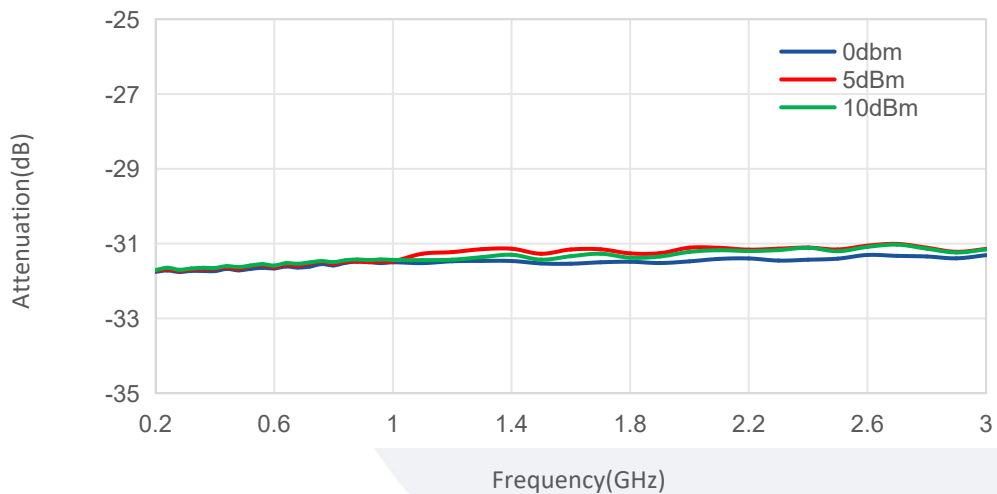
Attenuation@Pin $V_T=0.5V$



Attenuation@Pin $V_T=1V$



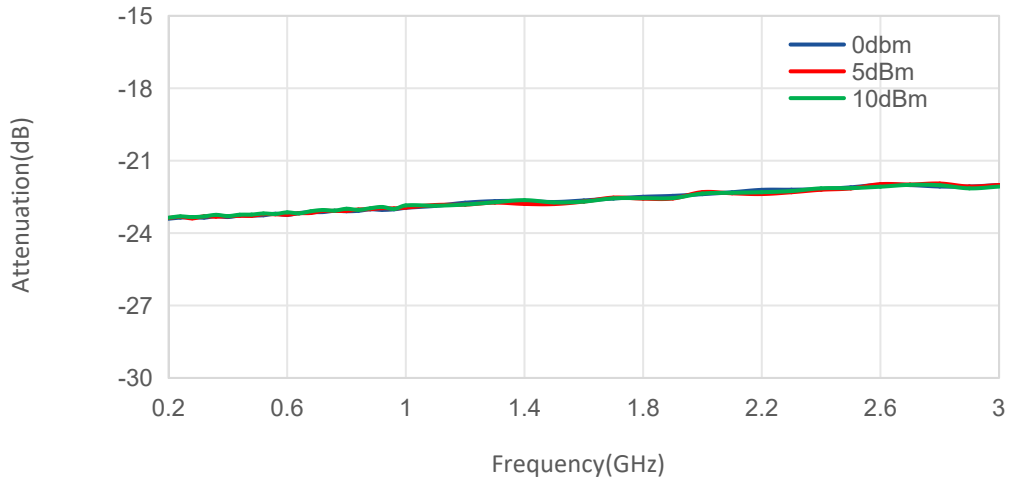
Attenuation@Pin $V_T=1.5V$



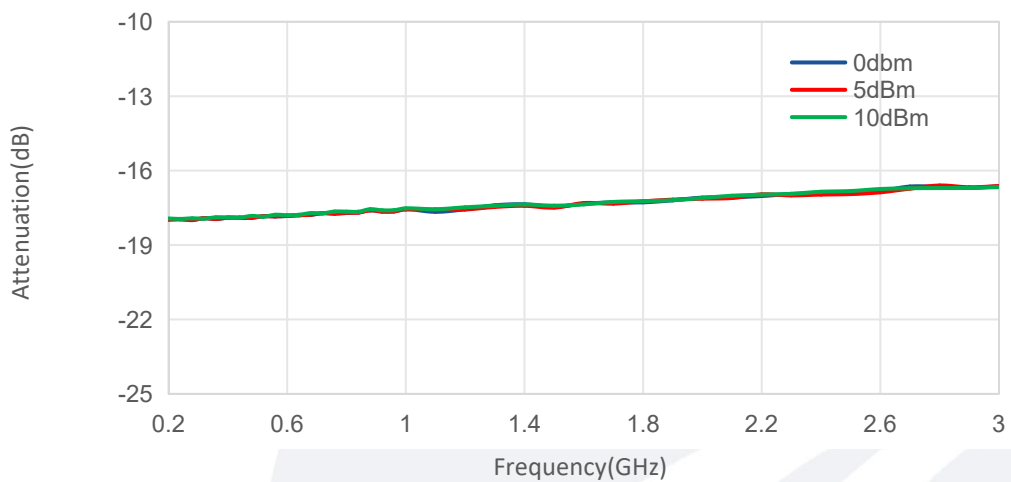
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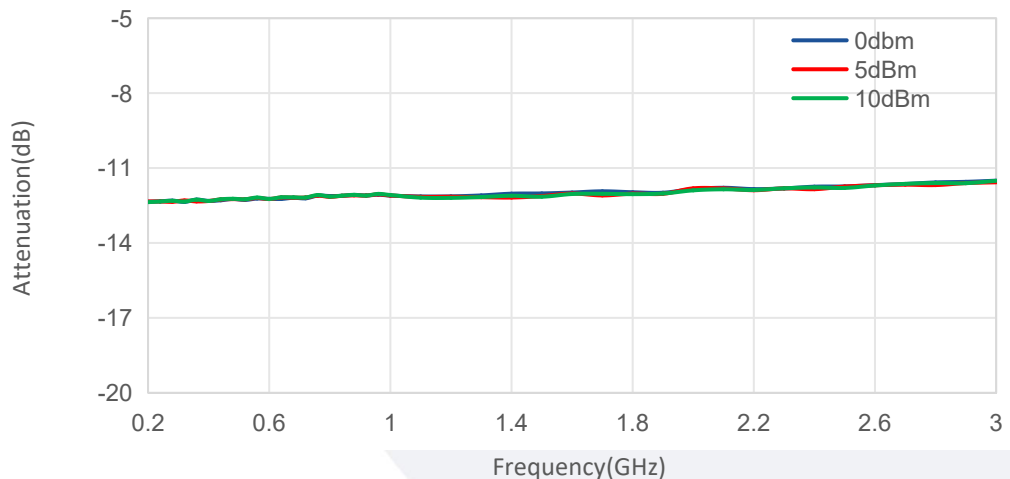
Attenuation@Pin $V_T=2V$



Attenuation@Pin $V_T=2.5V$



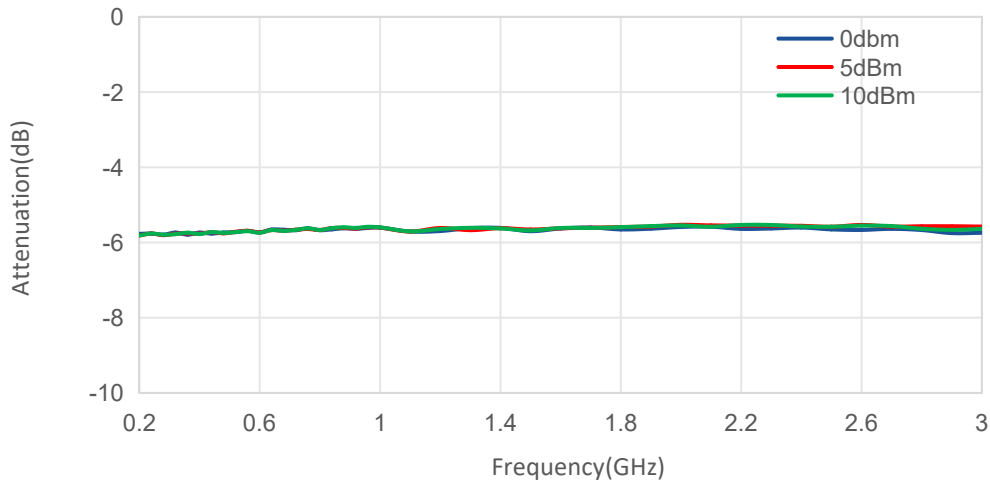
Attenuation@Pin $V_T=3V$



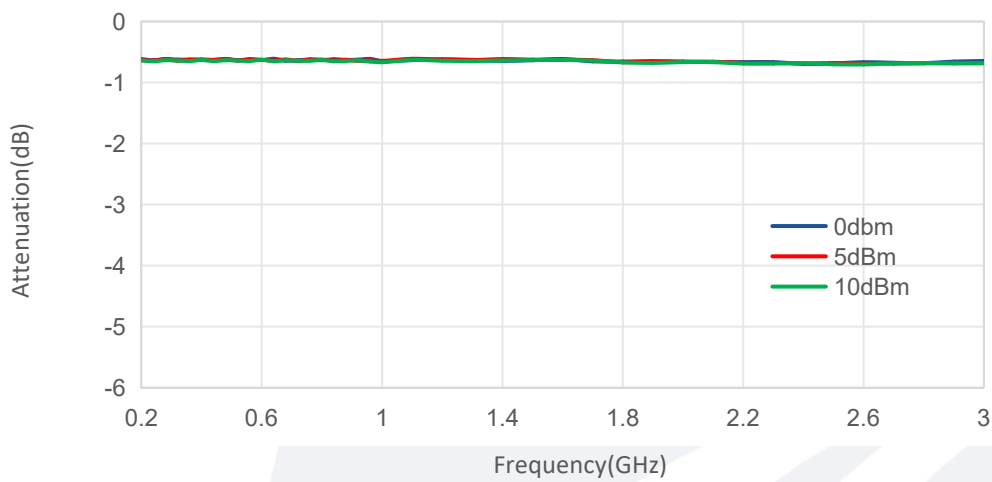
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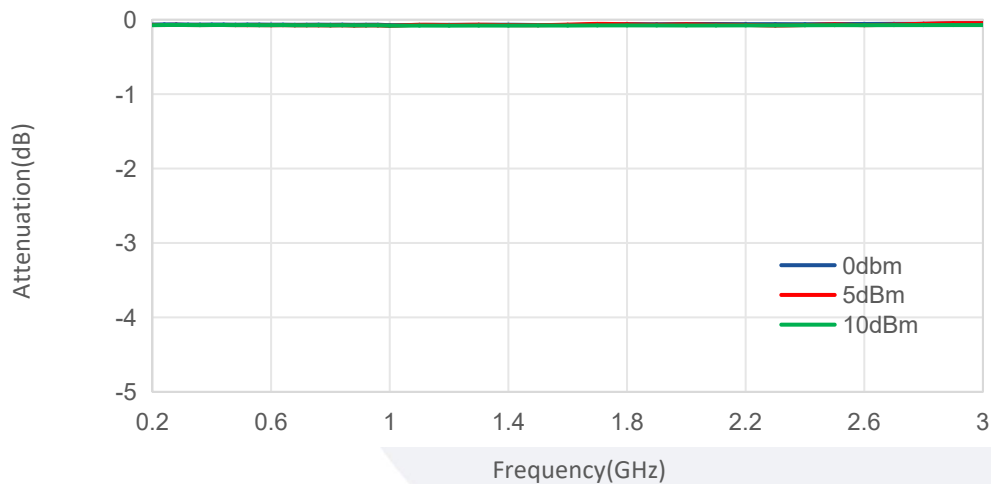
Attenuation@Pin $V_T=3.5V$



Attenuation@Pin $V_T=4V$

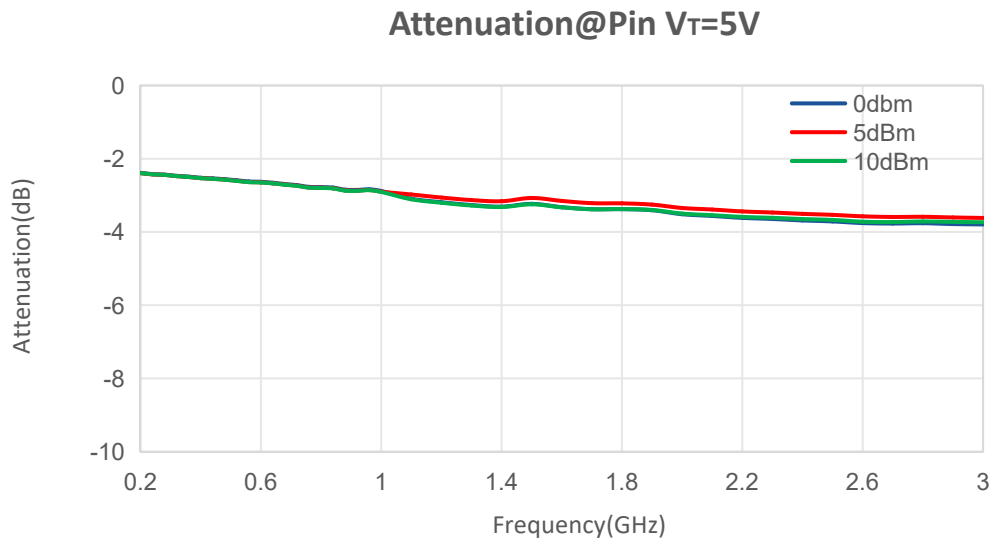


Attenuation@Pin $V_T=4.5V$



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