

Low PIM Attenuator – 100 Watts, DC - 6 GHz

Connectors - Type N



Features

- Low Passive Intermodulation Design (PIM)
- Smaller & lighter than coupler based designs
- 100% tested for IM3
- Designed for mobile infrastructure applications
- RoHS Compliant

Technical Specifications

Nominal Impedance	50 Ω
Frequency Range	DC to 6.0 GHz
Maximum Deviation Over Frequency	
Nominal ATTN (dB)	Deviation (dB)
3,6,10,20,30	+/- 1.25
40	+/- 2.50
Typical SWR	
Frequency	SWR
DC - 6 GHz	1.25
Power Rating	
<ul style="list-style-type: none"> - 100 W average, unidirectional at 25°C ambient. - Derated to 10 Watts at 125°C - 10 KW peak @ 5 μs pulse width & 0.05 % duty cycle. 	
Power Coefficient	< 0.00015 dB/dB/watt
Temperature Coefficient	< 0.0004 dB/dB/°C
Temperature Range	-55°C to 125°C
Forward Passive Intermodulation (PIM) Levels	
Nominal ATTN (dB)	Maximum 3rd Order IM Magnitude (IM3)
3,6,10	-140 dBc
20	-150 dBc
30, 40	-155 dBc

IM3 levels tested with two input signals @ 869 MHz and 891 MHz with average carrier power levels of +43 dBm each.

Mechanical Specifications

Construction	Black finned, aluminum alloy body; Low PIM connector construction	
Weight	580 grams (20.5 oz) maximum	
Connectors		
Options	Type	Description
3	N Female	Interface dimensions per MIL-STD 348 & IEC 60169-16. Mates non-destructively with MIL-PRF-39012 connector.
4	N Male	
7	4.3-10 Female	Mates non-destructively with DIN EN 61169-54 & IEC 61169-54 interfaces.
8	4.3-10 Male	

Swept data plots of attenuation and SWR from 50 MHz to 6 GHz are available upon request.

Model Number Description

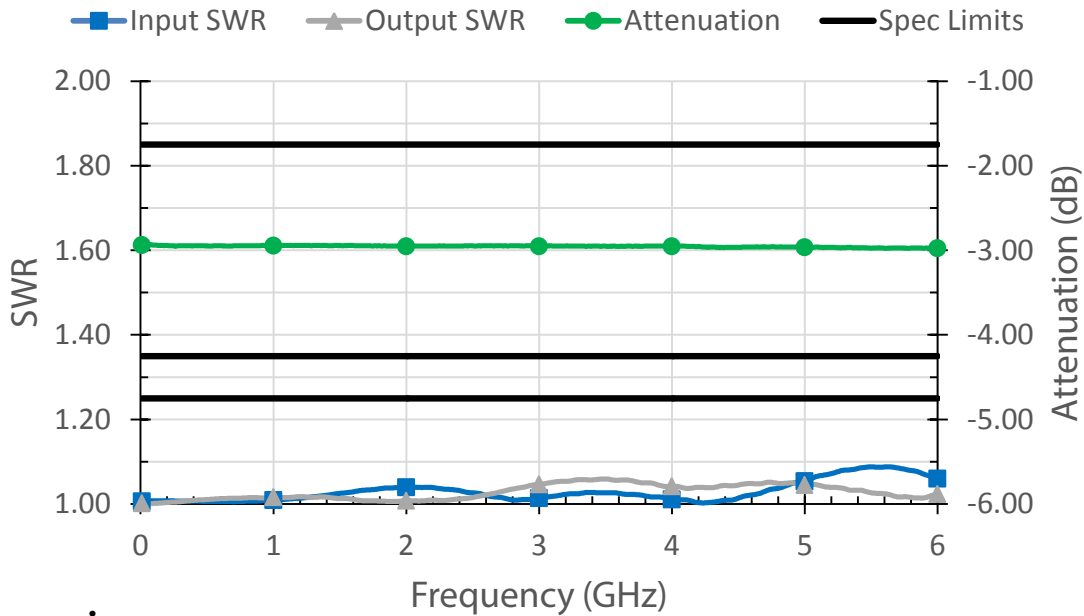
298 – XX – XX – LIM

Basic Model #

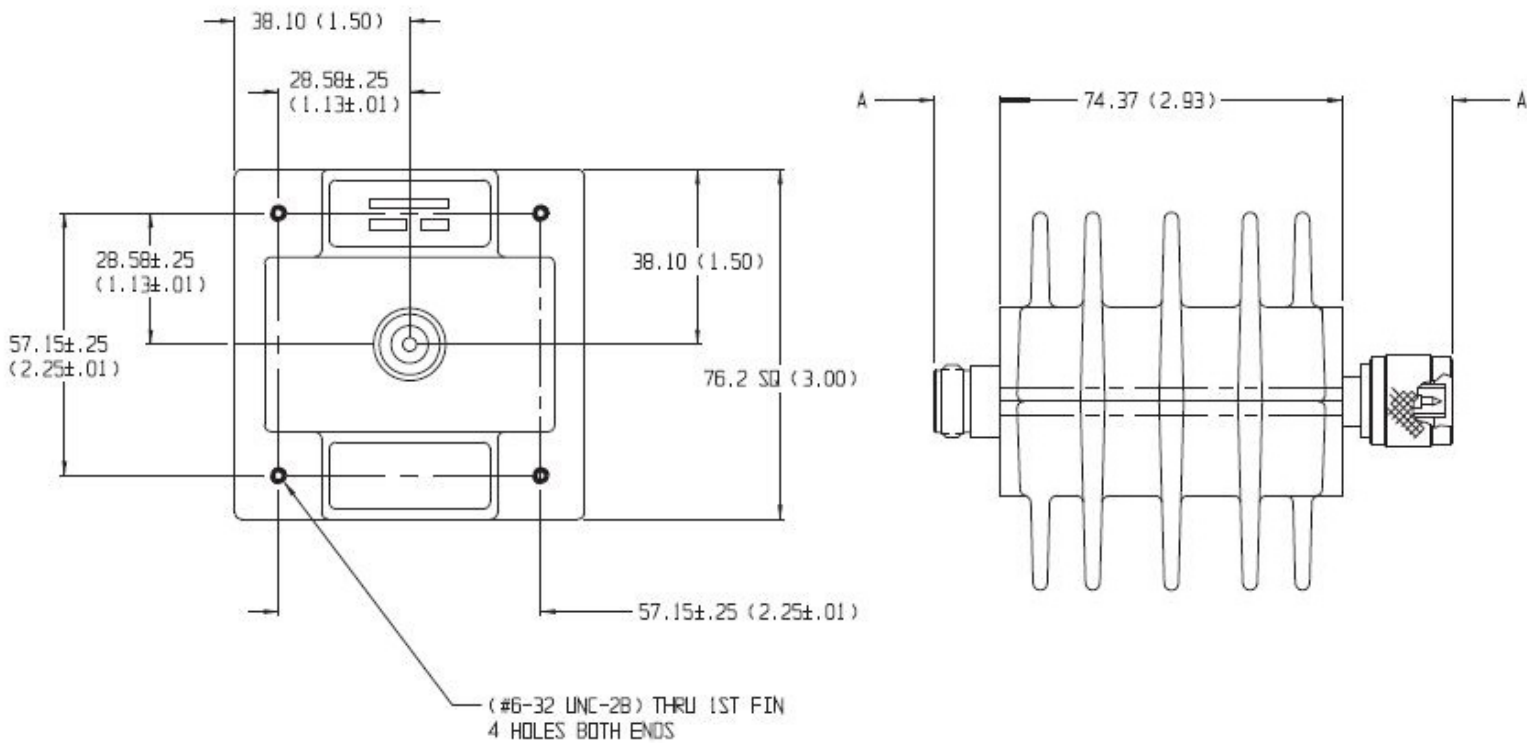
Attenuation Value (dB)

Connector Options
1st digit is input side
2nd digit is output side

Typical 298-3-34-LIM SWR & Attenuation



Physical Dimensions



Connector Dimensions			
Connector Option	Dim A mm (in)	Connector Option	Dim A mm (in)
N Male	23 (0.90)	N Female	14 (0.60)
4.3-10 Male	23 (0.91)	4.3-10 Female	21 (0.83)

NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.