



WR15 WR12 WR10 WR08 WR06 WR05 WR03 WR02.2

12MA30  
WR12 Mechanical Adjustable Attenuator  
60 to 90 GHz

### DESCRIPTION

The 12MA30 is a full WR12 waveguide band (60 to 90 GHz) adjustable attenuator. Patented (US7952450B2) technology assures a monotonic attenuation function in its attenuation adjustment across the entire operating frequency range. In addition, RF leakage is mitigated at higher attenuation values.



### HIGHLIGHTS

- Patented Technology
- Low Insertion Loss – typical 0.2 dB
- Minimum 30 dB Adjustable Range
- Accurate and Repeatable Settings
- Full continuous waveguide band coverage
- RoHS compliant

### APPLICATIONS

- General Purpose Manual Power Adjustment
- Test and Instrumentation
- System & Subsystem

## ELECTRICAL AND PERFORMANCE SPECIFICATIONS (+25°C)



Electrical Characteristics <sup>1</sup>	MIN	TYP	MAX
System Operating Frequency (GHz)	60	--	90
Insertion Loss (dB)	--	0.2	0.5
Attenuation Range (dB)	30	--	--
Return Loss (dB)	--	25	21
Power Handling (W)	--	--	0.3
Operating Temperature Range	+20°C	+25°C	+30°C
Storage Temperature Range	0°C	--	+70°C

Module Characteristics <sup>1</sup>	Description
Input Port & Output Interface <sup>2</sup>	WR-12
Mechanical Adjustment Length <sup>3</sup>	0.25" – 0.3"
Size (L x W x H) <sup>3</sup>	1.20" x 0.75" x 2.27" (30.5 mm x 19.1 mm x 57.7 mm)
Weight	≤ 2.5 oz (71 g)

<sup>1</sup> Specifications are typical and subject to change without notice

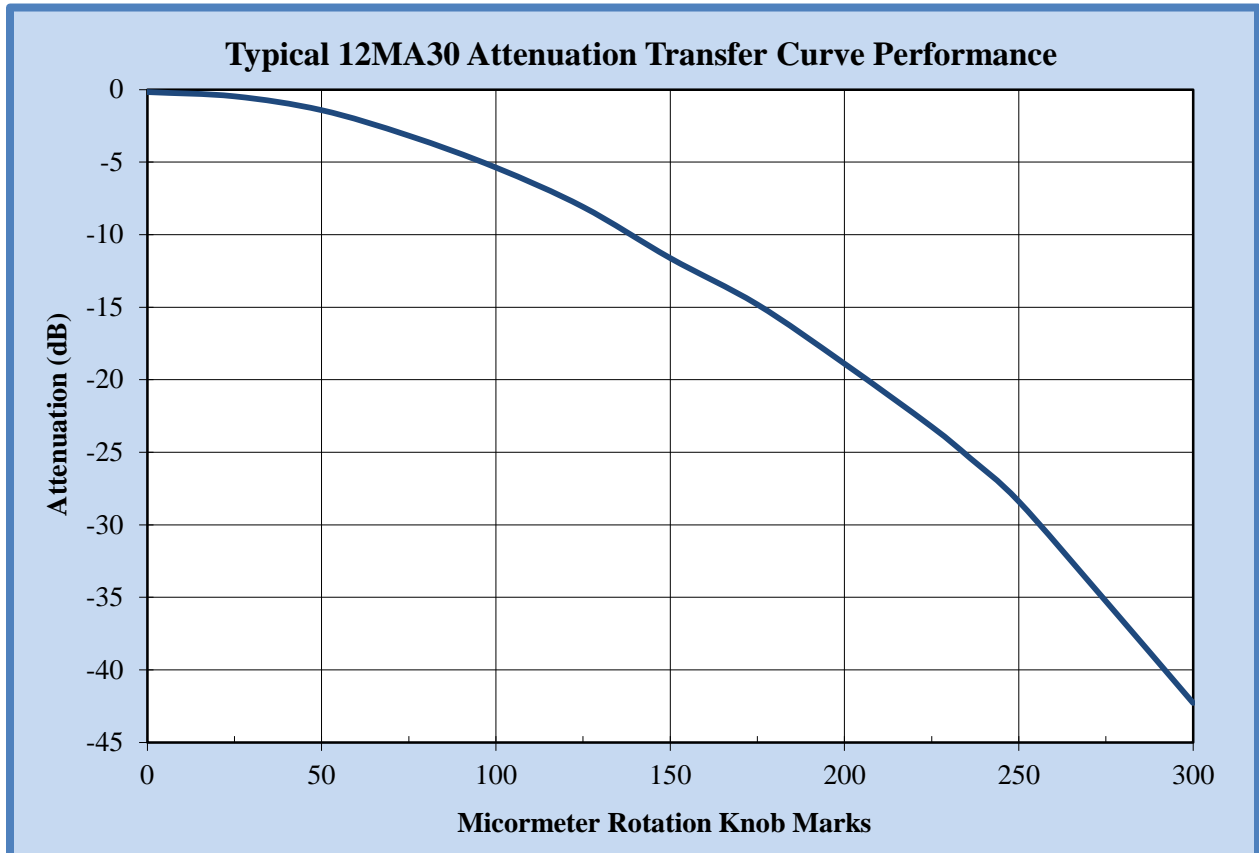
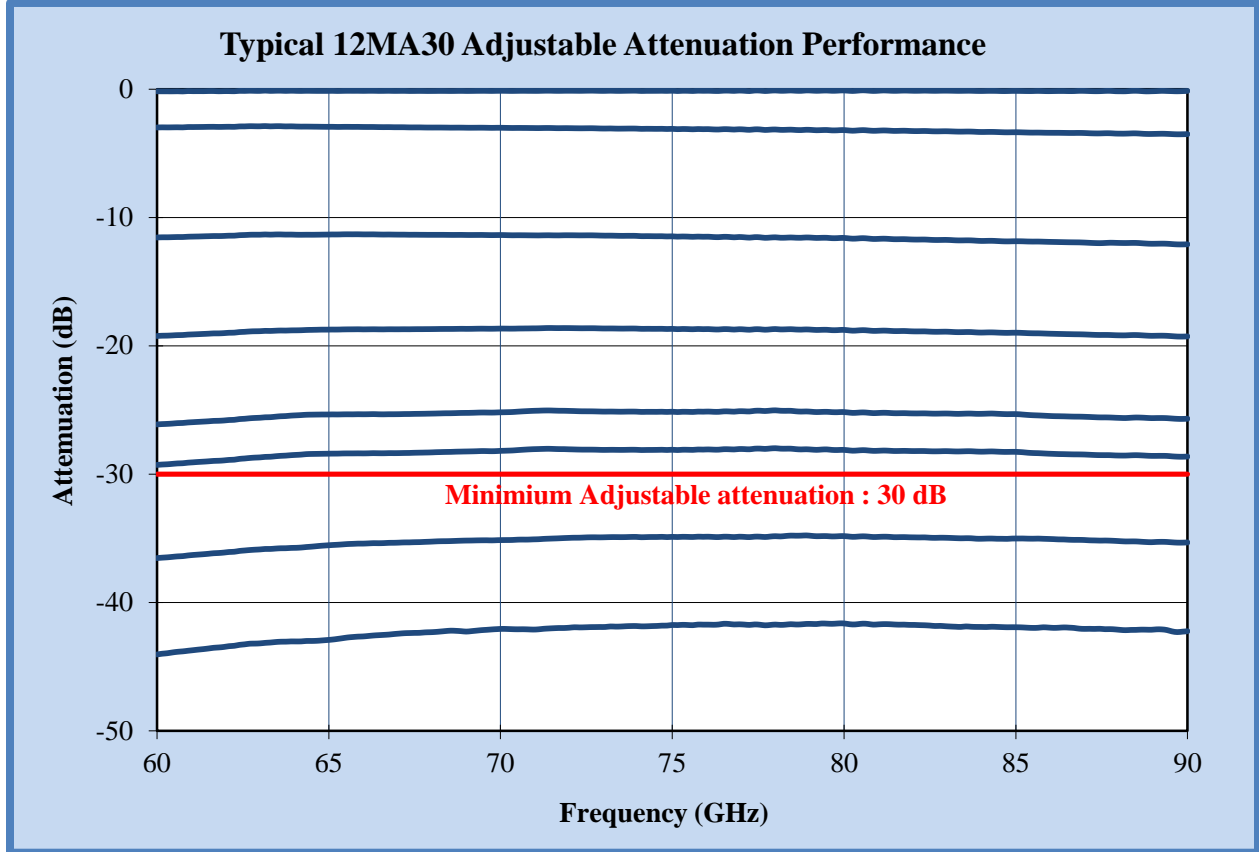
<sup>2</sup> Test Port Flange Configuration is compatible with MIL-DTL-3922/67E (UG387/UM)

<sup>3</sup> Nominal adjustment heights from "0" setting. **DAMAGE** may occur if rotate micrometer setting beyond maximum marking listed in the test datasheet.



### TYPICAL PERFORMANCE

The following typical performance is possible with the 12MA30 Series Mechanical Adjustable Attenuator.





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### ORDER INFORMATION

Model Number	Description
12MA30	WR-12 30 dB Mechanical Adjustable Attenuator Accessories: 8 ex. #4-40 Waveguide Screws
Option EF	

### MECHANICAL DIMENSIONS (If necessary, contact OML for more detailed drawings)

