

OML WR-12

VNA Calibration Kit

Serial # V12-01

Document : VNA12MD

Mechanical Calibration Data

Date: 15-Nov-01

ITEM	UNITS	T-12 Precision Term.	T-12 Precision Term.	S-12 Precision Short	S-12 Precision Short	OS-12 Precision Insert B	OS1/4-12 Precision Insert A	AL-12 Adjustable Load	W/G-12 Precision Section
W/G Length	<i>inches</i> <i>millimeters</i> <i>delay, pS</i>					0.1000 2.5400 8.475(8)	0.1533 3.8938 12.993(8)	0.300 (3) 7.62	2.0013 50.832 169.612(8)
W/G Width	<i>inches</i> <i>millimeters</i>	0.1220 3.0988	0.1220 3.0988			0.1220 3.0988	0.0510 1.5494	0.1220 3.0988	0.1220 3.0988
W/G Height	<i>inches</i> <i>millimeters</i>	0.0610 1.5494	0.0610 1.5494			0.0610 1.5494	0.0610 1.5494	0.0610 1.5494	0.0610 1.5494
Corner Radius	<i>inches</i> <i>millimeters</i>	< 0.001 < 0.0254	< 0.001 < 0.0254			< 0.001 < 0.0254	< 0.001 < 0.0254	< 0.001 < 0.0254	< 0.001 < 0.0254
Return Loss	<i>dB</i>	<35 dB	<35 dB			(A-B) offset, pS	4.517 (9)		
Surface Finish	<i>R_a</i>	<16	<16	< 8	< 8	< 16	< 16	< 16	< 16

TE 1,0 cutoff frequency = 48.362 GHz; TE 2,0 cutoff frequency = 96.724 GHz; GM(Fo) = 73.485 GHz.

Notes:

- 1) All dimensional tolerances are ± 0.0002 inches (± 5 microns) unless otherwise stated.
- 2) All dimensional measurements are traceable to N.I.S.T.
- 3) Adjustable Load travel, dimension is typical.
- 4) Surface Finish is specified in Surface Roughness Average (R_a) and applies to waveguide inside surfaces and flange faces.
- 5) Inquiries must include the Kit Serial # (V12-01).
- 6) Waveguide Length should be calibrated annually.
- 7) Damage to waveguide flange face surfaces invalidates calibration constants.
- 8) & 9) see reverse side of sheet.

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Table 1. Example "OML VNA Calibration Kit" data sheet