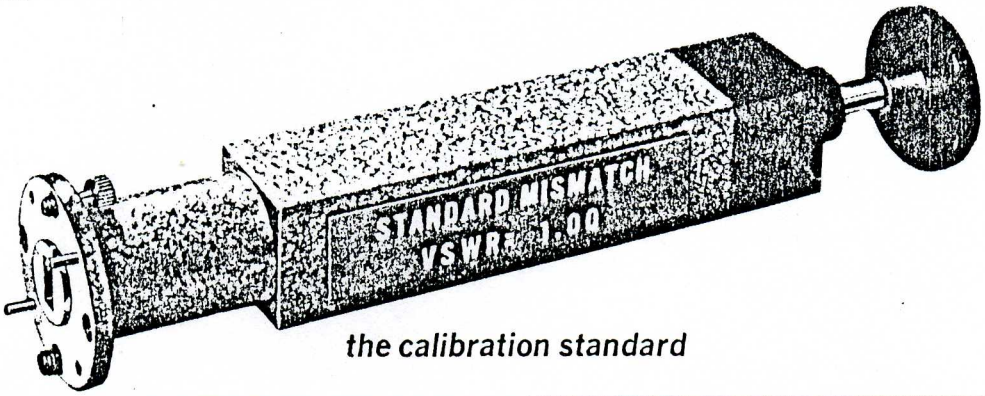
TERMINATIONS

WAVEGUIDE / MISMATCHES



the calibration standard

Microlab/FXR 510 series mismatched terminations are frequency insensitive devices for use over full waveguide bands. They consist of a step in the narrow dimension of the waveguide and a sliding termination with a VSWR less than 1.01 and a travel greater than one-half wavelength.

The mismatch is obtained by the step in the waveguide and has a VSWR value which deviates from nominal by less than 0.01. The sliding termination permits compensation of this small mismatch.

Mismatched terminations are employed to calibrate slotted lines, reflectiometers, or similar measuring devices.

MAX. VSWR DEVIATION	0.01
MAX. VSWR SLIDING TERMINATION	1.01
TEMPERATURE RANGE	−55°C to +125°C
HOUSING FINISH	paint, enamel
FLANGE MATERIAL	aluminum (< 12.4 GHz)
	brass (> 12.4 GHz)
FLANGE FINISH	anodize (< 12.4 GHz)
	silver (> 12.4 GHz)

BASIC UNIT — 1.50 MISMATCH VALUE

FREQUENCY RANGE (GHz)	FLANGE TYPE EQUIV.	WAVEGUIDE RG NO.	WAVEGUIDE WR NO.	MAX. AVERAGE POWER (watts)	OVERALL LENGTH (in) MIN.	OVERALL LENGTH (in) MAX.	WEIGHT (lbs)	MICROLAB /FXR PART NO.
2.60-3.95	UG-584/U	75	284	3	18.2	22.0	18.3	S510E
3.95-5.85	UG-407/U	95	187	3	13.4	17.6	7.4	H510E
5.85-8.20	UG-441/U	106	137	1	13.1	14.9	5.2	C510E
7.05-10.00	UG-138/U	68	112	1	13.1	14.8	4.0	W510E
8.20-12.40	UG-135/U	67	90	0.5	13.1	14.8	3.6	X510E
12.40-18.00	UG-419/U	91	62	0.5	8.9	9.8	3.6	Y510E
18.00-26.50	UG-595/U	53	42	0.3	11.3	13.4	3.6	K510EF
26.50-40.00	UG-599/U	96	28	0.3	5.2	5.6	0.9	U510EF

MISMATCH VALUE

VSWR	REFLECTION COEFFICIENT	5th CHAR.	ADD'L LENGTH (in)	ADD'L WEIGHT (lbs)	TYPICAL PART NO.
1.00	0.000	A	—	—	S510A
1.05	0.024	B	none	none	S510B
1.10	0.048	C	none	none	S510C
1.20	0.091	D	none	none	S510D
1.50	0.200	E	none	none	S510E

MICROLAB/FXR

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