

2.4mm SLIDE SCREW TUNER

Functional Description

The model 7941A tuner is a slide screw tuner with 2.4mm connectors ¹ which uses two probes to cover the frequency range of 12 to 50 GHz. Slide screw tuners are particularly suited for establishing impedances for device characterization or any other application requiring a precisely repeatable mismatch condition. The magnitude of the impedance mismatch is determined by the probe position (depth) and the phase of the impedance mismatch is determined by the carriage position. The probes operate independently of each other with little or no interaction. The low frequency probe covers the range from the lowest frequency to the crossover frequency, and the high frequency probe covers the range from the crossover frequency to the tuner's maximum rated frequency. **Figure 1** shows an example of typical response of a low frequency and high frequency probe.



Model 7941A

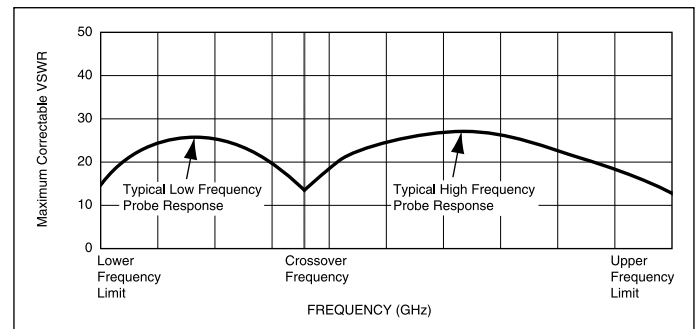
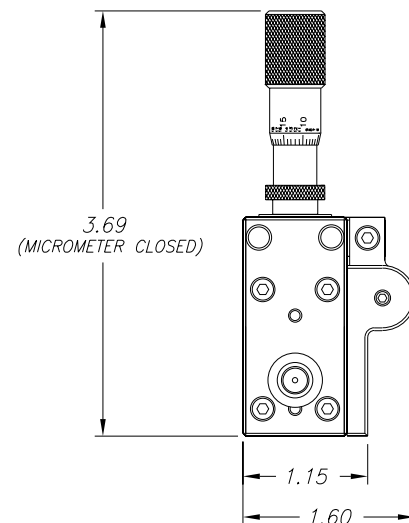
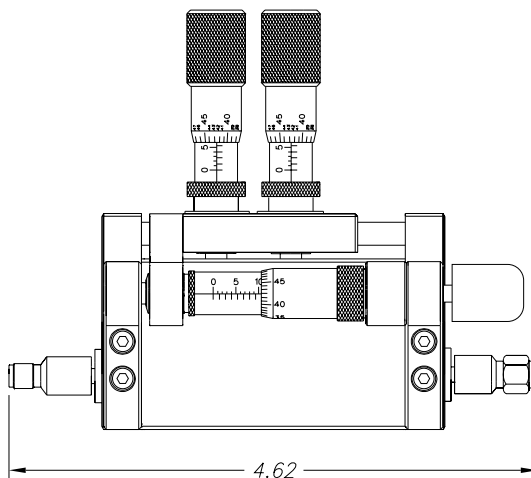


Figure 1. Typical Probe Response

Specifications

Frequency Range	12.0 — 50.0 GHz
VSWR Range	10:1 minimum
VSWR (Probes Retracted)	1.25:1 maximum
Loss (Probes Retracted)	1.0 dB maximum
Probe Crossover Frequency	21.5 GHz nominal
Power Handling	20 watts average, 200 watts peak

Dimensions



¹ Precision 2.4mm per 5E-064.