

## Product Note 74

# 10 to 50 GHz programmable Tuners with Prematching Module for on-wafer measurements

Model CCMT-5010-MPM-LN is an automatic high precision tuner, designed for on-wafer load-pull and noise measurements up to 50 GHz. The Manual Prematching Module, MPM, itself creates VSWR higher than 10:1 over the entire frequency range (figure 2), whereas the tuner, in combination with the MP module creates VSWR values higher than 20:1 up to 40 GHz and 15:1 up to 50 GHz (figure 3).

The extended 45° bend airline is directly attachable to the probe for minimum possible insertion loss and maximum tuning range.



Figure 1: 50GHz on-wafer tuner

Tuner Dimensions: L:7" x W:6.7" x H:5.7"  
 Airline extension beyond tuner box: 2.8"  
 Weight: 8lbs  
 Connectors: 2.4 mm m/f (User specified)

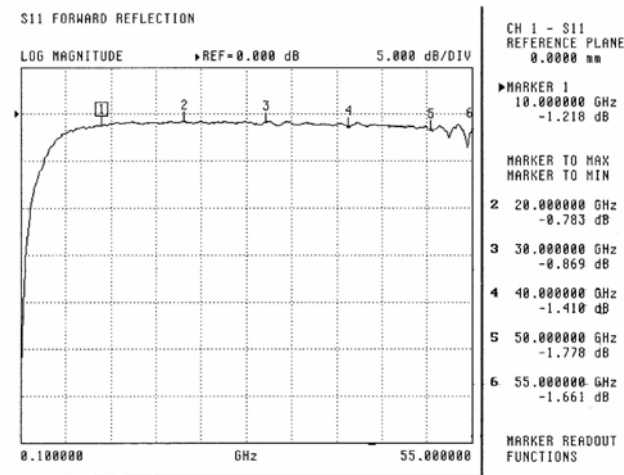


Figure 2: Maximum VSWR of manual prematching module MPM-5010.

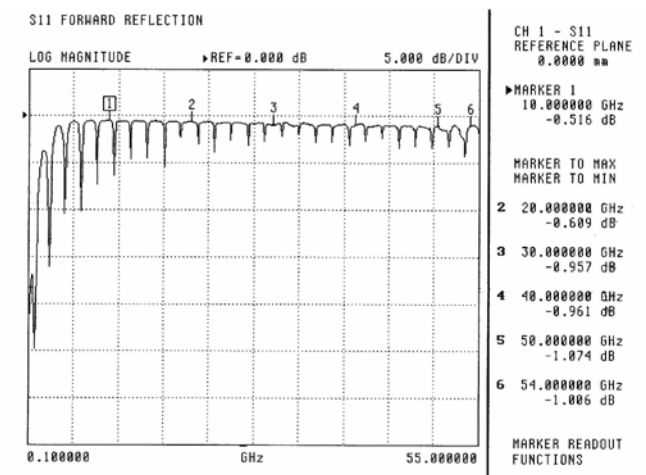


Figure 3: Maximum VSWR of 5010 tuner using manual prematching.