

MTC5515 Modulator Driver

Evaluation Report

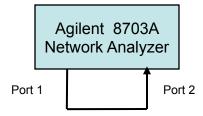
Tested on

February 27, 2009

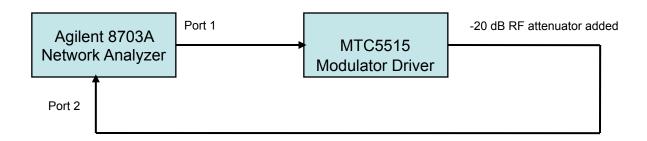


MTC5515 S-Parameters Test Configuration

Configuration 1



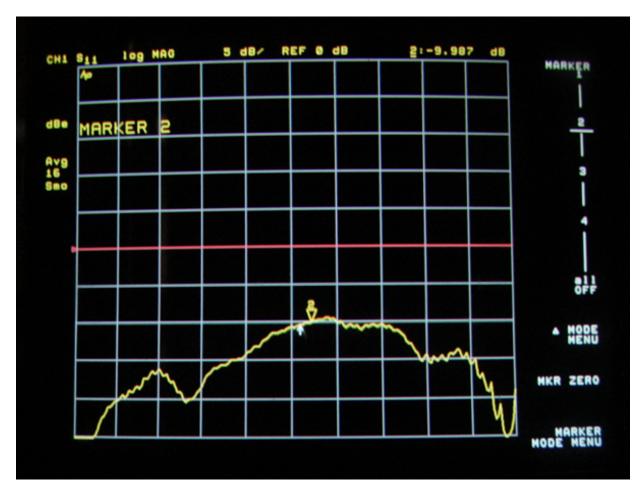
Configuration 2



Note: The trace of configuration 2 is subtracted from the trace of 1 to show the calibrated frequency S21 response of the overall device.



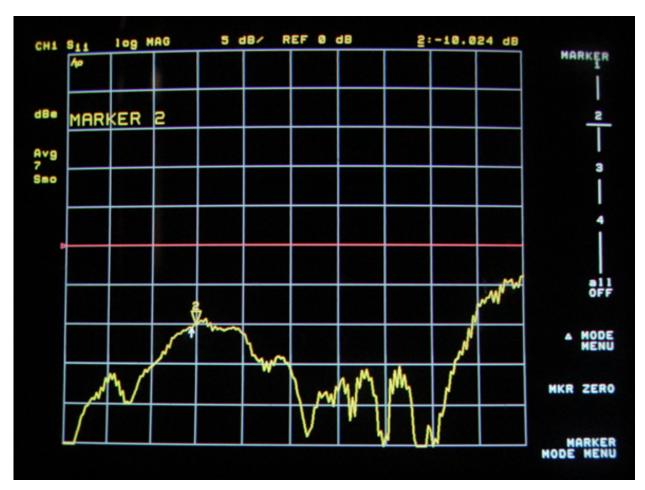
S11 Screenshot



Note: S11 from 0.130 GHz to 11 GHz. It can be seen that reflection stays below 10 dB for the device's bandwidth.



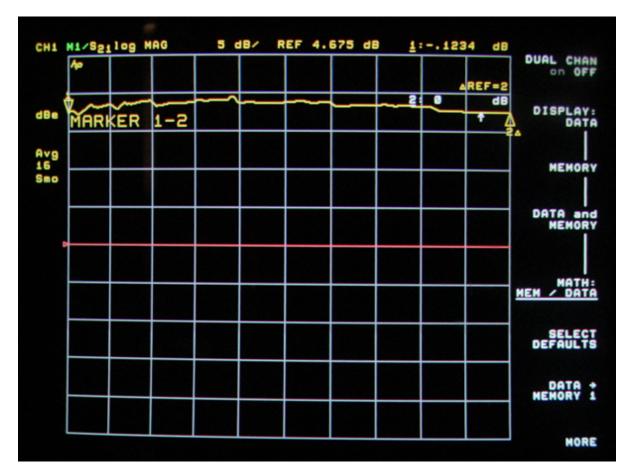
S11 Screenshot Cont.



Note: S11 from 0.130 GHz to 20 GHz. The reflection of the device increases at frequencies beyond the threshold of the device's intended bandwidth.



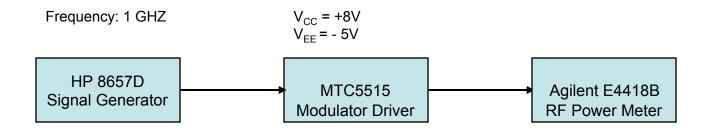
S21 Screenshot



Note: S21 frequency response from 0.130 MHz to 11 GHz



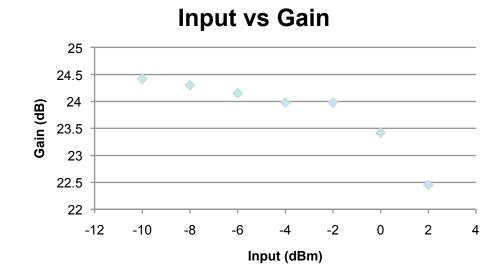
MTC5515 Gain Test Configuration





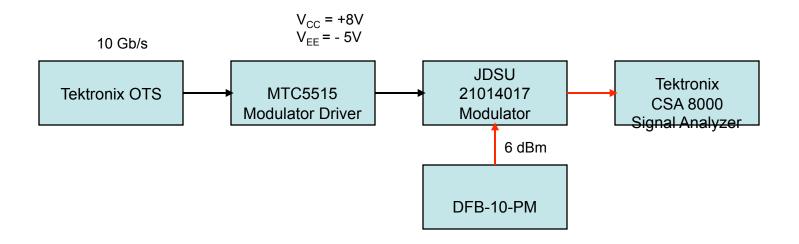
MTC5515 Gain Test Results

Input (dBm)	Output	Gain
-10	14.42	24.42
-8	16.3	24.3
-6	18.15	24.15
-4	19.98	23.98
-2	21.98	23.98
0	23.42	23.42
2	24.45	22.45



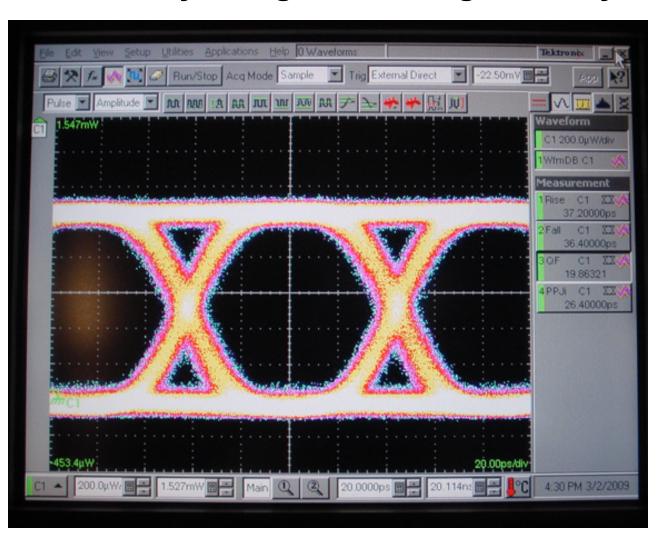


MTC5515 Signal Analysis Configuration





Eye Diagram and Signal Analysis Results



Rise Time: 37.2 ps Fall Time: 36.4 ps Q-Factor: 19.86 P-P Jitter: 26.4 ps

Extinction Ratio: 33.24 dB

Note: Eye Diagram from the configuration in previous slide.

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