



8514B S-Parameter Test Set, 0.045GHz to 20GHz, 3.5 mm

Data Sheet

Frequency Range: 0.045 to 20 GHz

Test Ports (port 1 or 2)

Nominal Operating Power Level:

2 to -6 dBm

Connector Type: 3.5 mm, male

Impedance, DC Bias: 50 ohm nominal, 500 mA, 40 Vdc maximum

Attenuation Range (incident signal)

0 to 90 dB, in 10 dB steps

RF Input Connector (rear panel)

Maximum Input Power: +16 dBm

Connector Type: 3.5 mm, female

Dynamic Range (for transmission measurements)

Frequency Range (GHz)

.045 to 2 2 to 8 8 to 20

Maximum Power (dBm)

Measured at Port 2: +20 +11 +10

Reference Power (dBm)

at Port 1 (nominal): +2 -2 -6

Minimum Power (dBm)

Measured at Port 2: -66 -95 -95

Receiver

Dynamic Range (dB): 86 106 105

System

Dynamic Range (dB): 68 93 89

Measurement Port Characteristics

Frequency Range (GHz)

.045 to 2 2 to 8 8 to 20

Residual (dB)

Directivity: 48 44 44

Source Match: 40 33 31

Load Match: 48 44 44

Reflection Tracking: ± 0.003 ± 0.003 ± 0.006

Transmission Tracking: ± 0.017 ± 0.044 ± 0.084

Crosstalk: 89 115 110



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Raw (typical) (dB) (before calibration/error correction)

Directivity: 23 23 14

Source Match: 17 15 11

Load Match: 17 15 11