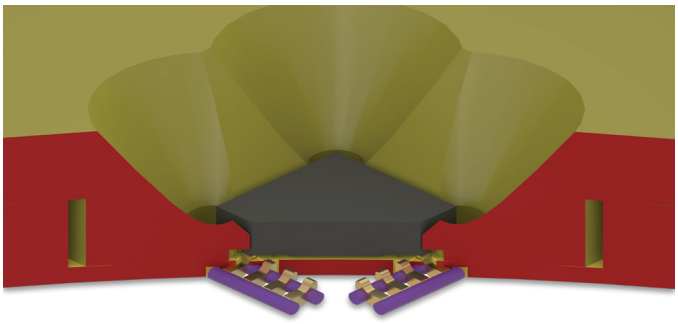
Ironwood ELECTRONICS

ATE FemtoRaptor Cartridge

For Analog/RF/MMWave Device Testing



ATE FEMTORAPTOR TEST CONTACTOR

The ATE FemtoRaptor Test Contactor delivers exceptional rigid-contact performance for both laboratory and high-volume production test environments. Designed to meet demanding electrical and mechanical test requirements, it incorporates several advanced technologies to maximize reliability and throughput:

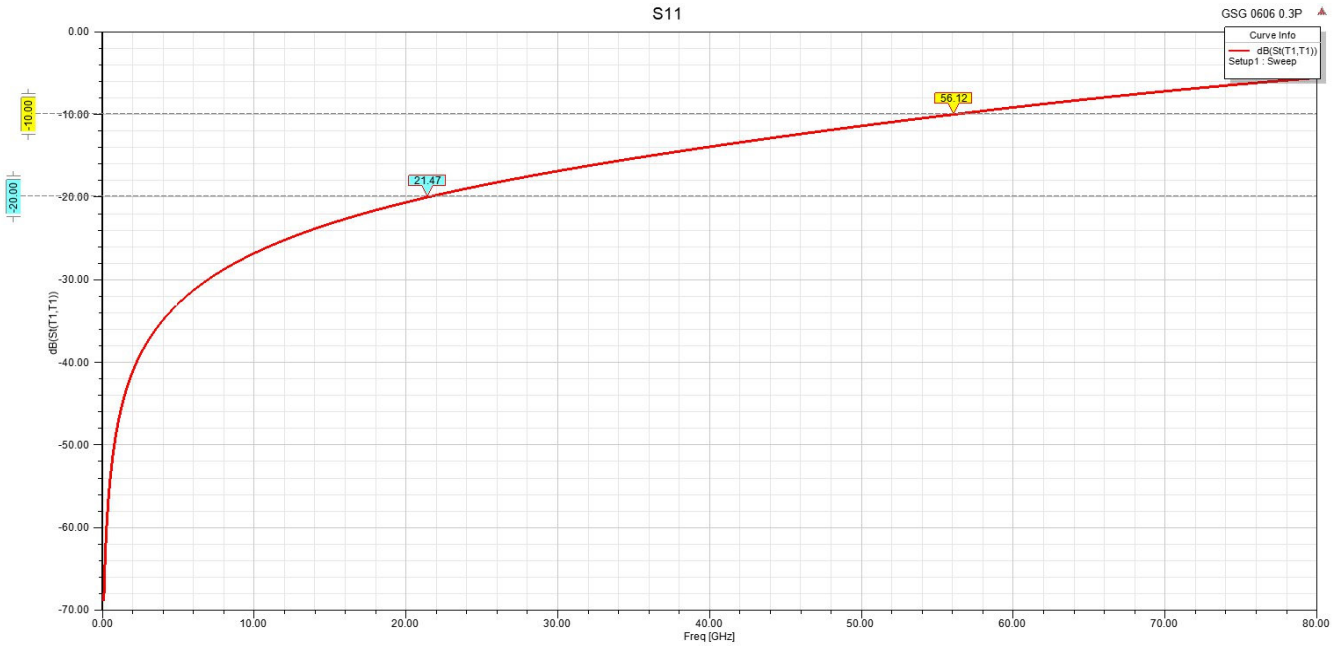
- Patented Short Wiping System (SWS) technology effectively breaks through surface oxides to ensure consistent electrical contact.
- Advanced Contact Finish (ACF) provides a highly polished contact surface for improved signal integrity and durability.
- AirTherm internal air-channel technology enhances thermal management, reducing device soak time and improving overall test efficiency.

Like all Ironwood ATE products, the FemtoRaptor features a fully replaceable cartridge design, allowing fast end-of-life replacement with minimal downtime and reduced operating costs.

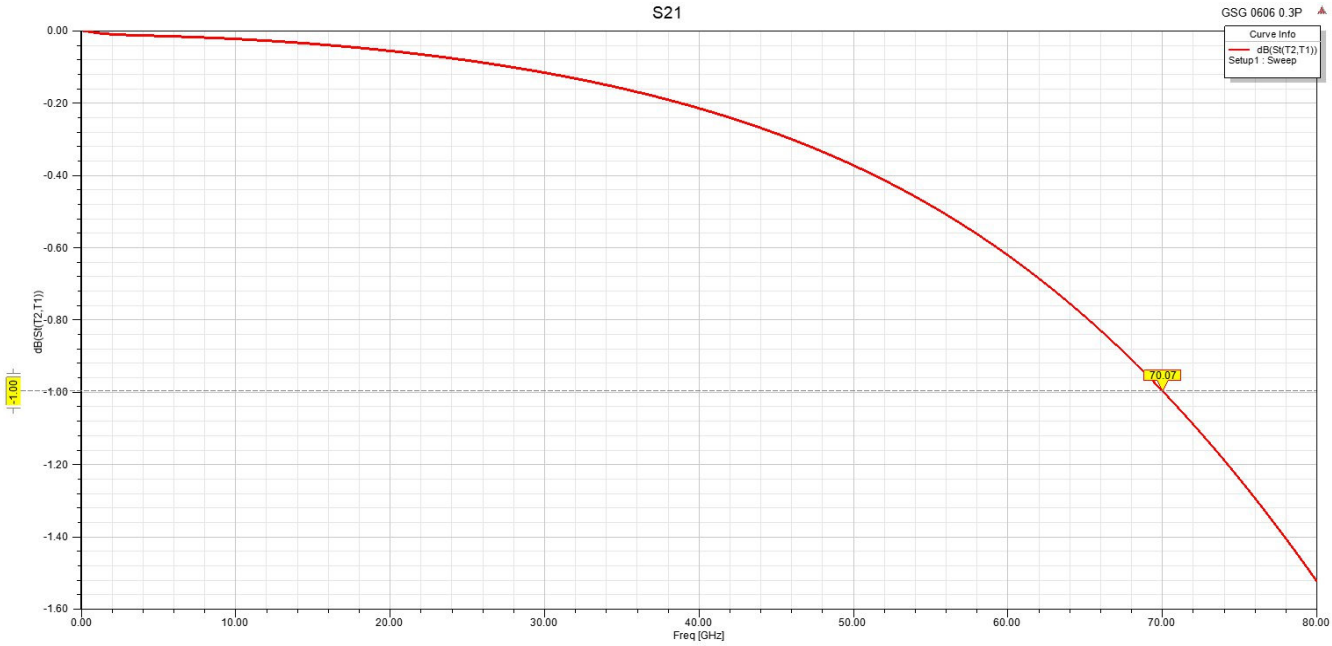
Engineered for seamless integration with most IC handler platforms, the ATE FemtoRaptor Test Contactor offers a cost-effective, high-performance solution for today's most challenging semiconductor test applications.

4.0 PERFORMANCE

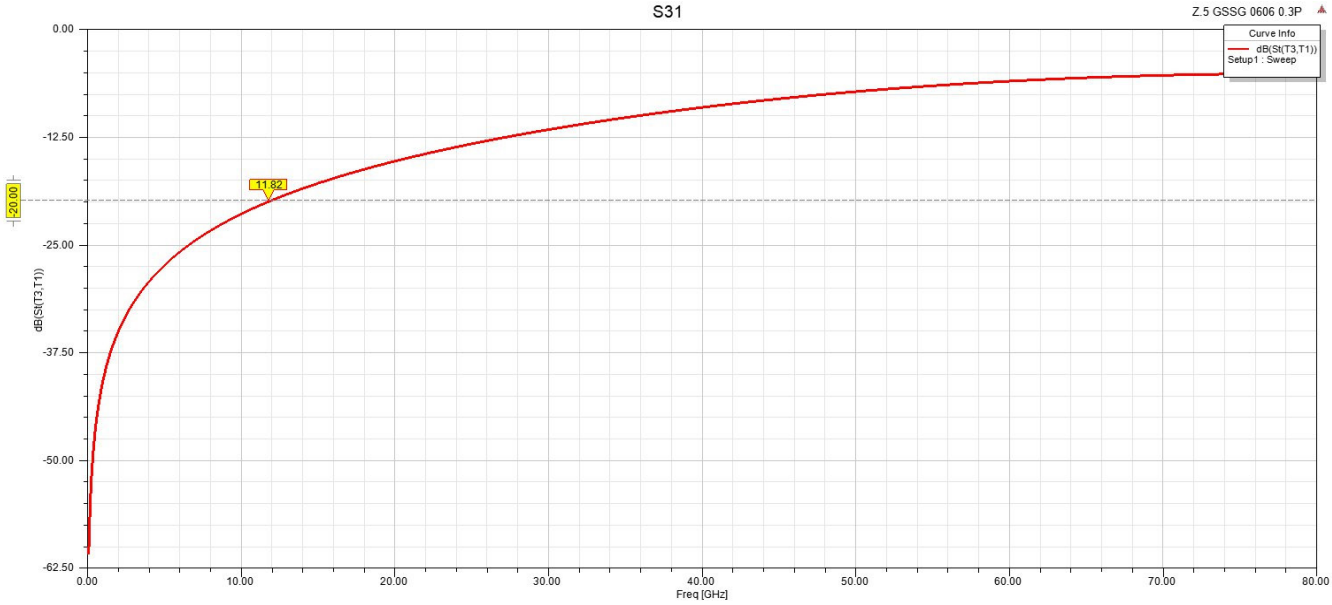
4.1 : S11 (Return Loss)



4.2 : S21 (Insertion Loss)

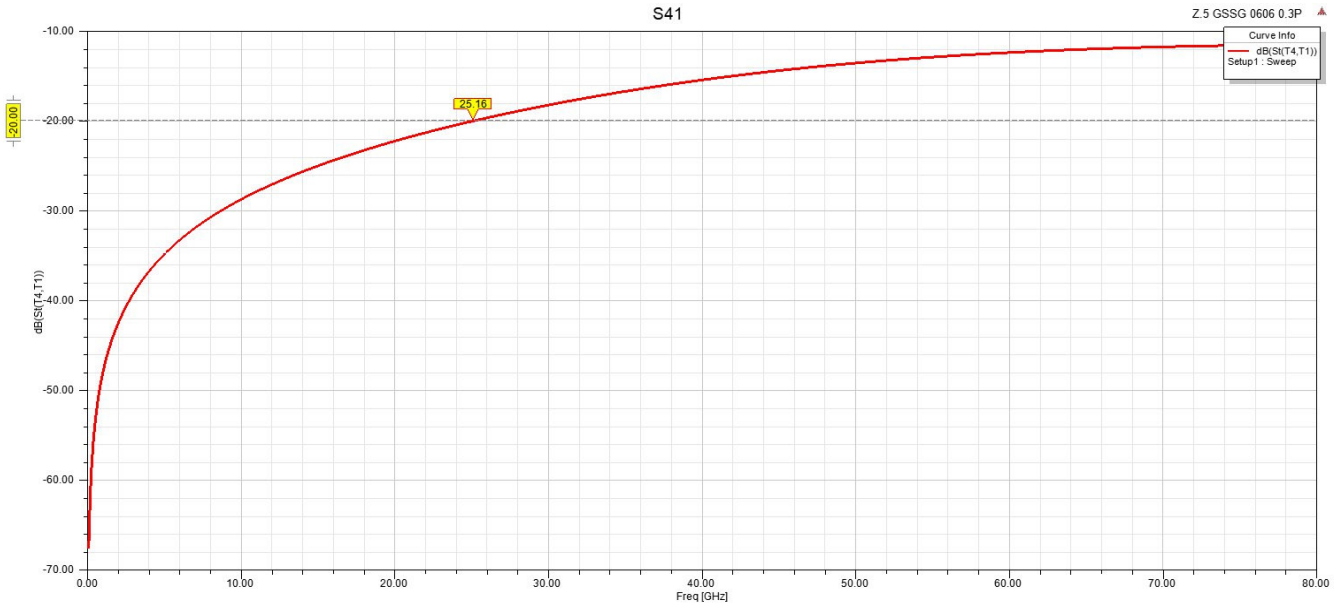


4.3 : S31 (Near End Crosstalk)



4.0 PERFORMANCE (CONT.)

4.4 : S41 (Far End Crosstalk)



ELECTRICAL SPECIFICATIONS

Self-Inductance (nH)	0.19
Mutual Inductance (nH)	0.08
Ground Capacitance (pF)	0.04
Mutual Capacitance (pF)	0.02
S21 (Insertion Loss/Bandwidth)	- 1dB @ 70GHz
S11 (Return Loss/Bandwidth)	- 20dB @ 21GHz
S41 (Crosstalk /Bandwidth)	- 20dB @ 25GHz
Contact DC Resistance (mΩ)	≤ 20.0
Current Carrying Capacity (A)	3
Current Leakage (pA) @ 10V	≤0.1

MECHANICAL SPECIFICATIONS

Pin Uncompressed Height (mm)	0.58
Pin Compliance (mm)	0.15
Pin Tip Coplanarity (mm)	±0.05
Pin Wiping Length (mm)	≤ 0.08
Gram Force per Pin (g)	13 ~23
Number of Insertion - housing	≥ 1M
Number of Insertion - Elastomer	≥ 100K
Number of Insertion - pin (NiPd) Number of Insertion - pin (Matte Tin)	≥ 100K
Operating Temperature (°c)	-45 ~ 155
Pin Material	BeCu - NiAu