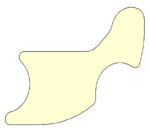
Ironwood ELECTRONICS

QR Code

Electrical Simulation Report For FemtoRaptor

1.0 SPECIFICATION



Pin Design

Name	FemtoRaptor
Part Number	ZP-STP-0.5-0606-H
Revision	1
Material	BeCu-Ni-Au
X-Y-Z Size	0.743mm x 0.53mm x 0.15mm

2.0 SETUP

Software Used	ANSYS Electronics Desktop 19.0
Simulation	S11 (Return Loss) S21 (Insertion Loss) S31 (Near End Crosstalk) S41 (Far End Crosstalk) Inductance Capacitance
Pitching	0.30mm
Pin Thickness	0.15mm
Configuration	GSG & GSSG

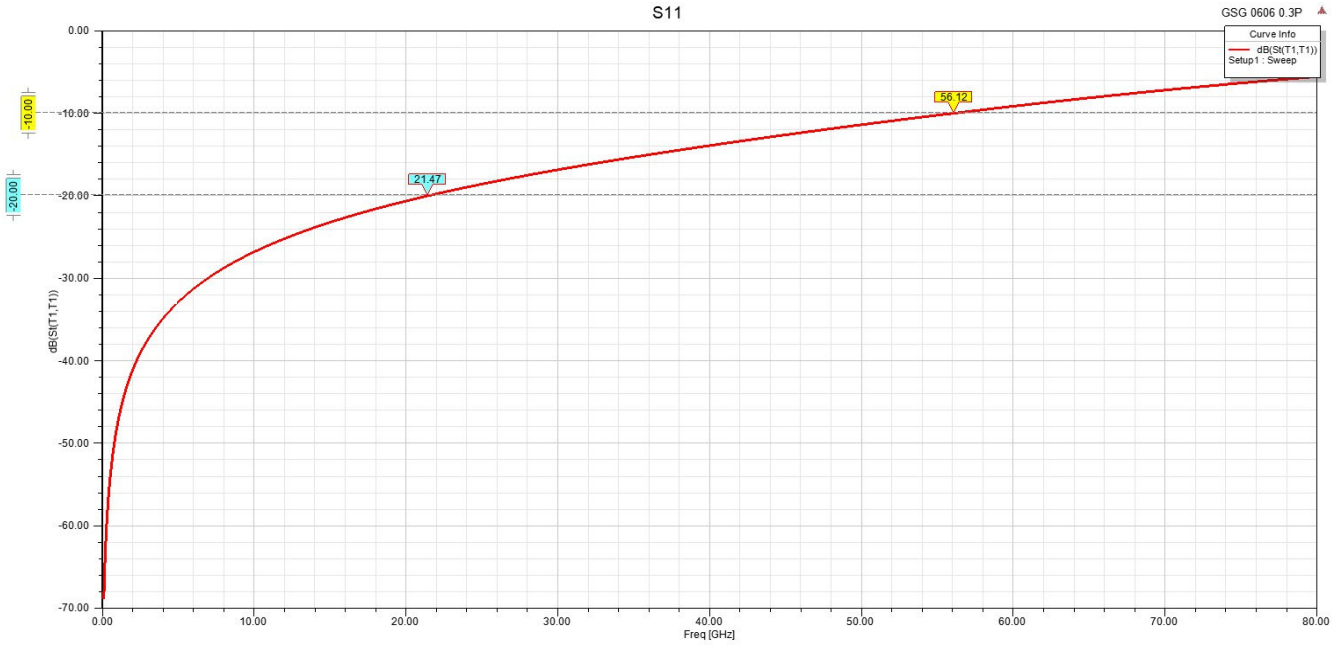
3.0 DIAGRAM

3.1 : GSG Configuration

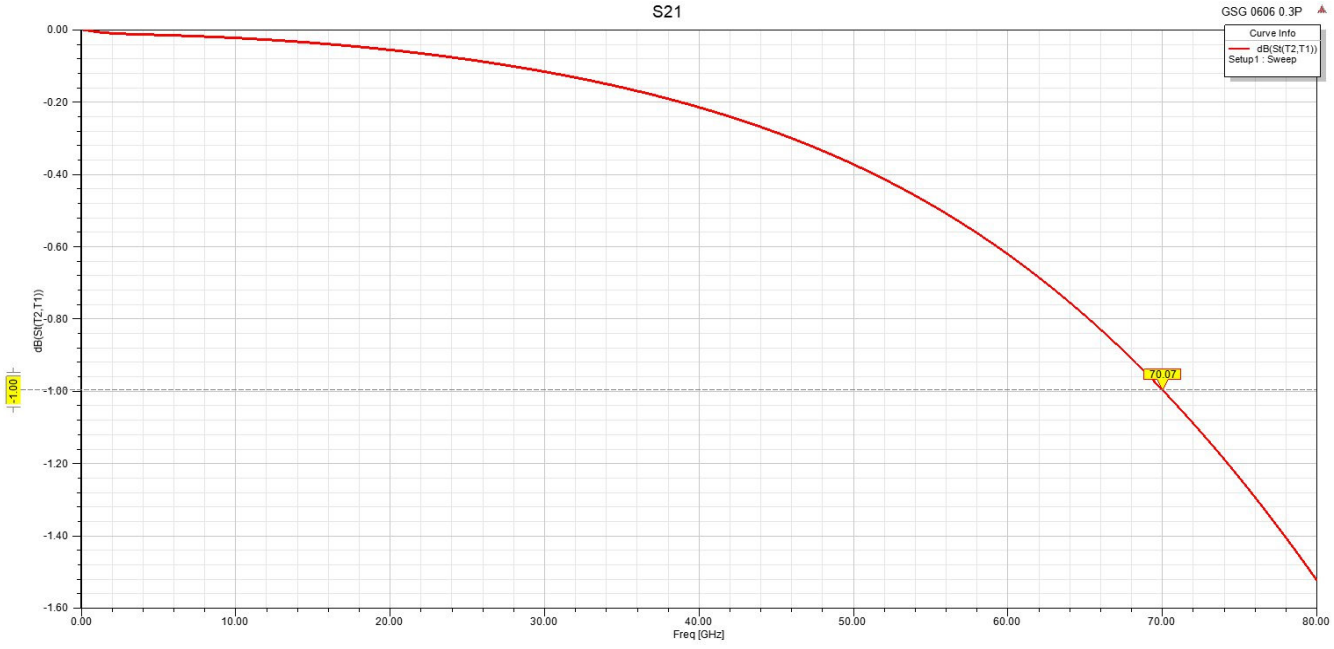
3.2 : GSSG Configuration

4.0 PERFORMANCE

4.1 : S11 (Return Loss)

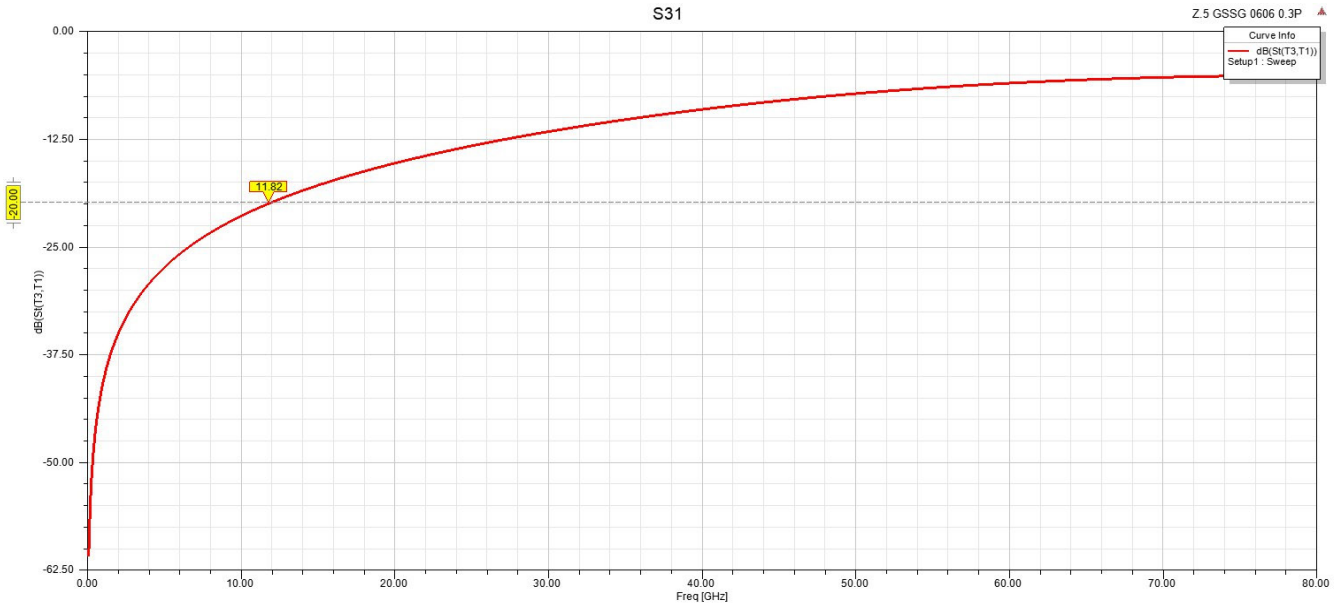


4.2 : S21 (Insertion Loss)

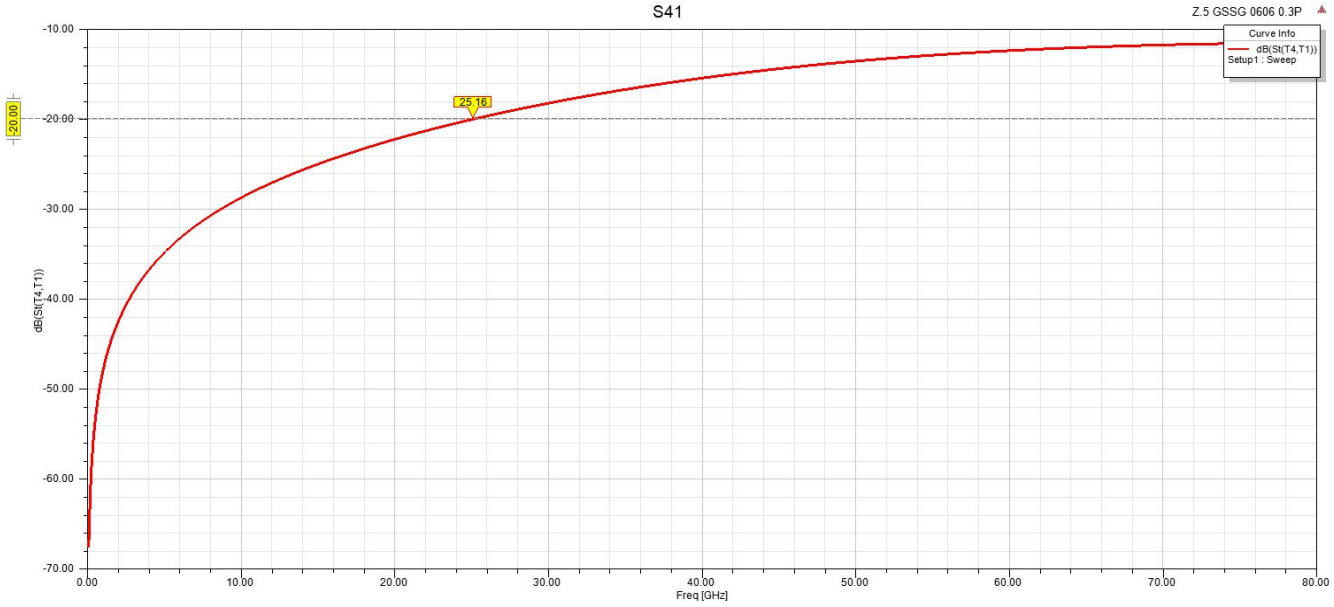


4.0 PERFORMANCE (CONT.)

4.3 : S31 (Near End Crosstalk)



4.4 : S41 (Far End Crosstalk)



5.0 DATA EXTRACTION

Electrical Specifications	FemtoRaptor Contact	
S11 (RL)	-20 dB @	21 GHz
S21 (IL)	-1 dB @	70 GHz
S31 (NExT)	-20 dB @	11 GHz
S41 (FExT)	-20 dB @	25 GHz
Capacitance	Ground:	0.04 pF
	Mutual:	0.02 pF
Inductance	Self:	0.19 nH
	Mutual:	0.08 nH

END OF REPORT
06 January 2025