

Johnstech®

Electrical Modeling



Order an electrical representation of your device's performance in a test environment with Johnstech International's Electrical Modeling Services. Our system-level approach to modeling allows you to simulate the actual performance of your system including your device, load board, and contactor. Expose potential design risks, as well as enhancement opportunities minimizing uncertainty and costly mistakes.

Whether you're developing an RF application below 1GHz or designing a radar power amplifier at 80GHz, Johnstech's engineers will simulate your system, resulting in a comprehensive performance summary of your data, giving your end customers higher confidence in your test solution.

Typical modifications resulting from electrical modeling result in:

- An optimized contactor interface to your load board design
- Package Layout Simulation from Device to I/O
- Trace and pad characteristics
- Impedance matching
- Housing modification effects
- Contact design choice
- Ground inductance and plane changes

Contact your **Johnstech Sales Representative** today to add Electrical Modeling Services to your premium test solution.

SERVICES

S-Parameters Data File

Provide measured S-parameters or HFSS modeled S-parameters of the contacts or contactors

Contactor S-Parameter Plots

Provide Return Loss, Insertion Loss, and Crosstalk plots of S-parameters of the contacts or contactors

Load Board Optimization

Provide guidance on contactor interface for your load board design

System-Level S-Parameters

Provide S-parameters of the whole system which includes load board, contactor, and package.

Eye Diagram

Provide eye diagram of total solution or individual parts of system simulated

TDR Plot

Provides TDR plot of customer design or any part simulated at customer specified frequency

SOFTWARE

- High Frequency Structure Simulator (HFSS)
- Keysight Advanced Design System (ADS)
- Solidworks
- Keysight Genesys

Johnstech®

SMART. CONNECTED. GLOBAL.



Johnstech®

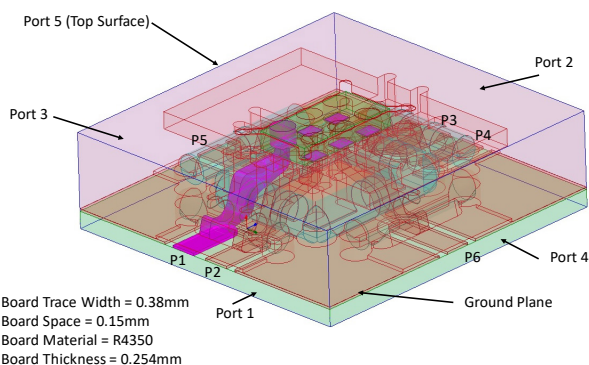
Electrical Modeling

Johnstech International offers a wide selection of premium service solutions to benefit your business. Our professional and experienced RF engineers employ advanced modeling and simulation techniques to measure anticipated crosstalk, insertion loss, amplifier gain, susceptibility to ground inductance and isolation, and other key design parameters.

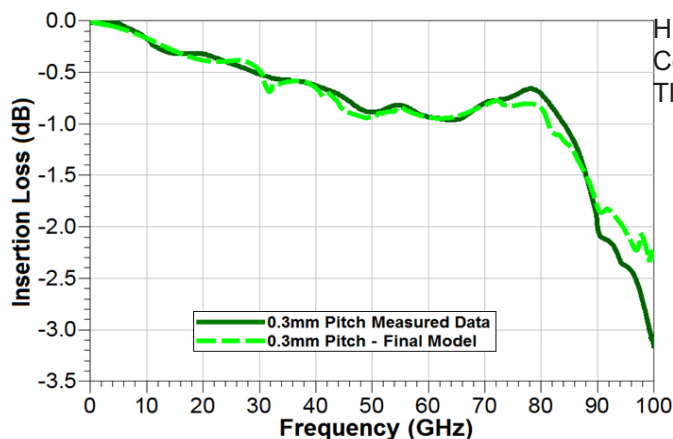
BENEFITS OF MODELING

- Analyze, predict, and optimize performance
- Identify improvements to system components (Contactor, Load Board, pad sizes)
- Calibrate Out Parts of the System (Contactor, Interfaces, Etc.)
- Determine potential problems before building a hardware
- Determine expected performance for guard bands
- Determine interaction between components in system

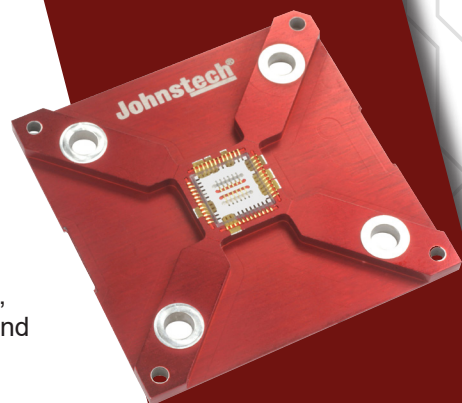
SAMPLE USE CASES



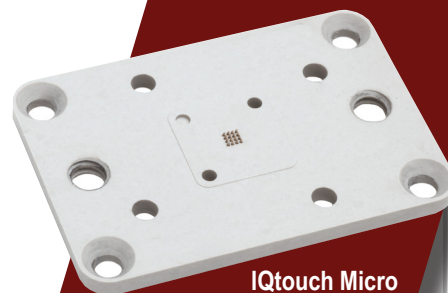
0.5mm Pitch 6 Lead DFN
Contactor HFSS Model – RF
Path



HFSS Modeled Data
Compared to Measured
Third Party Results



Pad ROL100A Performance Plus



IQtouch Micro

DATA MODELED AND
MEASURED TO
100GHz



Johnstech®

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