

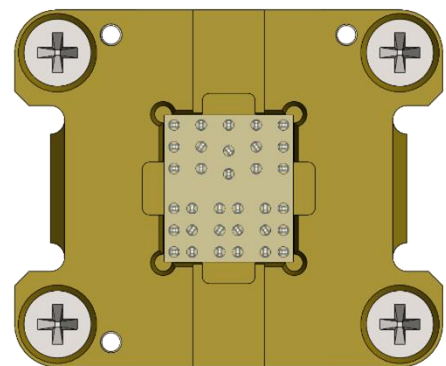
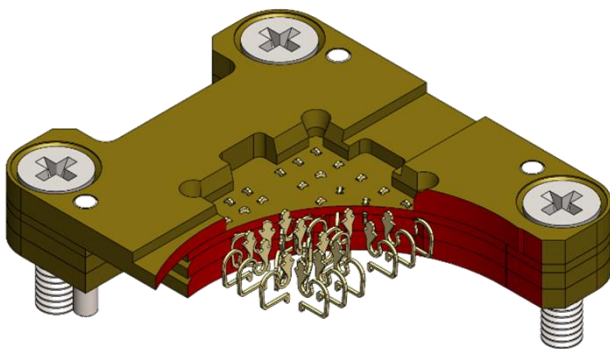
THOR™ TEST CONTACTING SOLUTION

(PATENT PENDING)

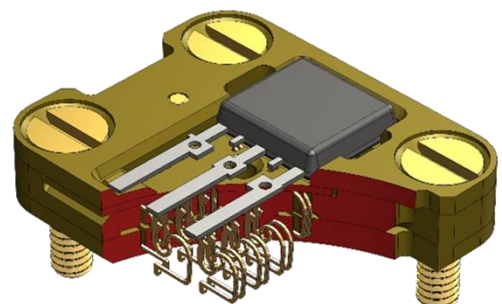
FOR TRI-TEMPERATURE NON-KELVIN TESTING

The Thor Family of Test Contacting Solutions is designed and validated through high-volume production test environments. This contacting technology is a proprietary, flexing style, vertical actuation contacting solution with a horizontal micro-wipe on the device lead and our optional TCC (Thermal Conditioning Channel) Technology; enables to meet electrical and mechanical test requirements. Thor contacting technology provides simple installation, minimizes debris, prolongs need for cleaning, and minimize the maintenance time and cost.

Key Features	Thor Technology Delivers
Vertical Actuation	Micro-wipe on the device lead through utilization of our USWS (Ultra Short Wiping Stroke) Technology
Robust Contact Tip	Provides excellent contact to device lead with significant surface-to-surface contact for good current carrying capacity
Ease of Assembly	Effectively shortens maintenance and downtime
Pretension Contact Design	Ensures excellent co-planarity of contact tips
TCC (Thermal Conditioning Channel) Technology	Maintains thermal set point of device during test process
Thor, Thor Jr, Thor HD	Various test pin configuration for variety of test applications



Top View



Package Styles : SOC, SOIC, TO, SOP, QFP, QFN,
TSOP, LGA, DR-QFN

Pitch : $\geq 0.4\text{mm}$

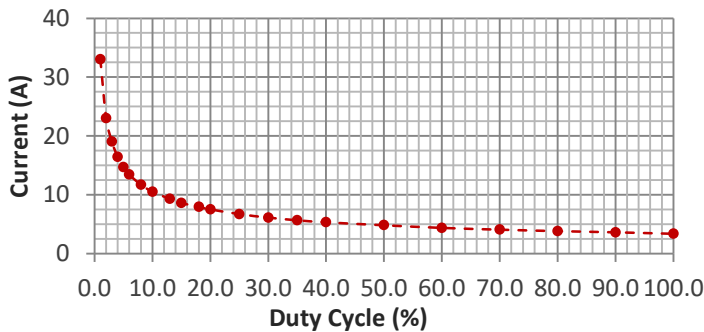
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<http://www.jf-technology.com>

Electrical Specifications ^①	Thor Jr.
Self Inductance (nH)	4.41 *
Mutual Inductance (nH)	1.71 *
Ground Capacitance (pF)	0.201 *
Mutual Capacitance (pF)	0.138 *
S21 (Insertion Loss / Bandwidth)	- 1dB @ 2.74GHz *
S11 (Return Loss / Bandwidth)	- 20dB @ 0.53GHz *
S41 (Crosstalk / Bandwidth)	- 20dB @ 1.25GHz *
Contact DC Resistance (mΩ)	≤ 30 *
Current Carrying Capacity (A) <i>Duty Cycle 100%</i>	3.5 *
Current Leakage (pA) @ 10V	≤ 1 *

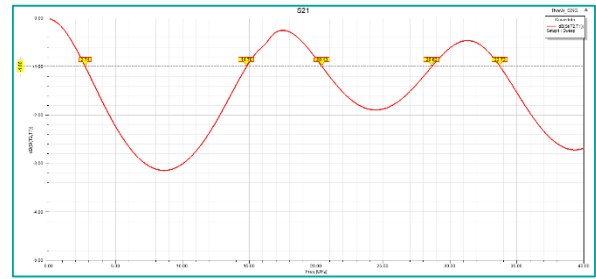
① Based on Thor Jr Contactor with 0.15 thickness, 0.5mm pitching

Mechanical Specifications	Thor Jr.
Contact Uncompressed (mm)	3.4
Contact Compliance (mm)	0.2
Contact Tip Coplanarity (mm)	± 0.05
Contact Wiping Length (mm)	< 0.05/pin
Gram Force per Contact (g)	30 ~ 40
Number of Insertions - Housing	2 Million
Number of Insertions - Contact (Matte Tin)	300K ~ 500K
Number of Insertions - Contact (NiPd)	
Operating Temperature (°C)	- 60 to +180
Socket Material	Torlon® 5030 or equivalent
Contact Pin Material	BeCu-Ni-Au

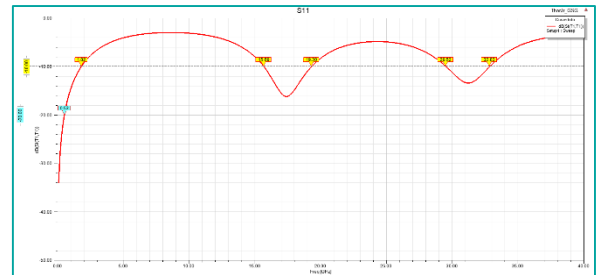


CCC Chart @ 0.15mm thickness of pin

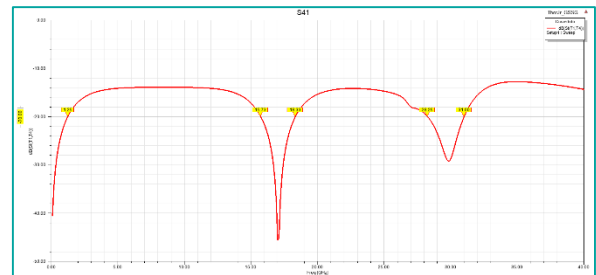
Thor Jr. Performance



S₂₁ Insertion Loss^②

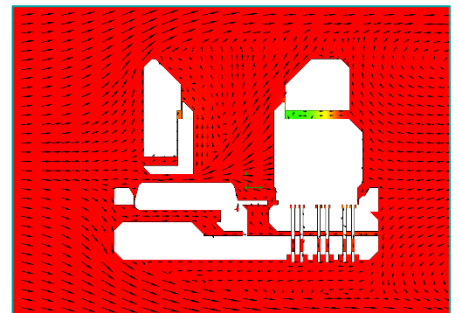


S₁₁ Return Loss^②



S₄₁ Crosstalk^②

② Simulated Results based on Thor Jr Contact with 0.5mm pitch



TCC Technology - Maintain Thermal Set Point

Note *: The stated specifications are based on JF Microtechnology's Laboratory Test; the results may vary subjected to the test environment conditions. Information furnished by JF Microtechnology is believed to be accurate and reliable. However, no responsibility is assumed by JF Microtechnology for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Specifications subject to change without notice. No license is granted by implication or otherwise under any patent or patent rights of JF Microtechnology. Trademarks and registered trademarks are the property of their respective owners.

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