

Hercules™

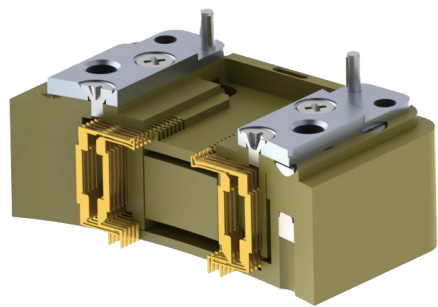
Test Contacting Solution

For TRI-Temperature Kelvin and Non-Kelvin Testing

Hercules is cantilever style pin with single-datum locking design that used for Automotive and Mixed Signal applications that require consistent contact resistance [Cres/RDS(on)] along with device under test temperature controlled $\pm 2^{\circ}\text{C}$ and long mechanical life in production environments.

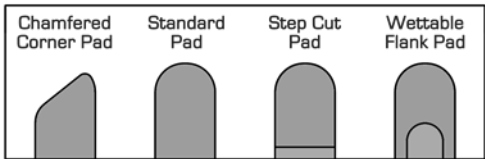
The solution has the succeed story to match profile and height of EcoAmp, Multitest handler.

Key Features	Hercules Technology Delivers
SWS (Short Wiping Stroke) Technology	Ideal for Short Pads, Chamfered Corner Pads and Wettable Flank and Step Cut Styles. Less debris generation
TCC (Thermal Conditional Channel) Technology	Maintains thermal set point of device during test process
Temperature testing of -60°C to $+180^{\circ}\text{C}$	Reliable temp test with single piece pin construction
Loadboard Friendly	No mechanical movement or wearing on loadboard pad



Package Styles : **SOC, SOIC, TO, SOP, QFP, QFN, TSOP, LGA, DR-QFN**
Pitch: **$\geq 0.4\text{mm}$**

Designed for



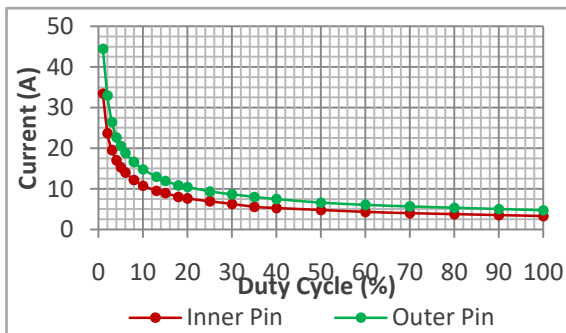
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<http://www.jf-technology.com>

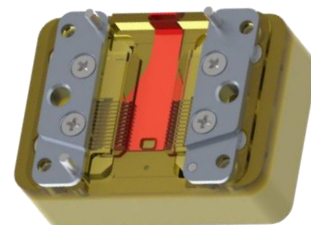
Electrical Specifications ^①	Hercules Inner	Hercules Outer
Self Inductance (nH)	14.38 (Kelvin) *	
Mutual Inductance (nH)	10.82 (Kelvin) *	
Ground Capacitance (pF)	3.66 (Kelvin) *	
Mutual Capacitance (pF)	3.40 (Kelvin) *	
S21 (Insertion Loss / Bandwidth)	-1dB @ 0.64GHz *	
S11 (Return Loss / Bandwidth)	-20dB @ 0.15GHz *	
S41 (Crosstalk / Bandwidth)	TBD	
Contact DC Resistance (mΩ)	≤ 35 *	
Current Carrying Capacity (A) <i>Duty Cycle 100% (300ms)</i>	3.5 *	4.7 *
Current Leakage (pA) @ 10V	≤ 1 *	

① Based on Hercules Contact with XXX mm pitch

Mechanical Specifications	Hercules
Contact Uncompressed (mm)	15.52
Contact Compliance (mm)	0.2
Contact Tip Coplanarity (mm)	± 0.05
Contact Wiping Length (mm)	~0.15/kelvin ~0.07/pin
Gram Force per Contact (g)	30 ~ 50
Number of Insertions – Housing	N/A
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 @ 0.2mm thickness of pin



TCC Technology – Maintain Thermal Set Point

Sales & Service Representatives

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.