

# HERCULES™

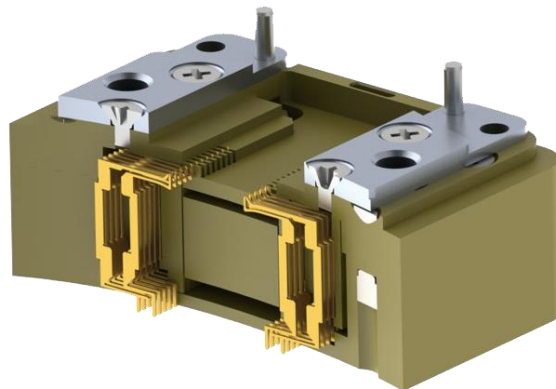
## TEST CONTACTING SOLUTION

## FOR TRI-TEMPERATURE KELVIN AND NON-KELVIN TESTING

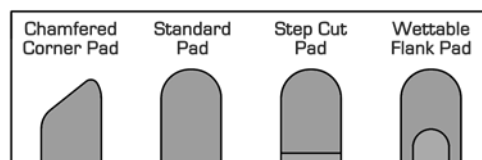
Hercules is cantilever style pin with single-datum locking design that used for Automotive and Mixed Signal applications that require consistent contact resistance [CRes/RDS(on)] along with device under test temperature controlled  $\pm 2^{\circ}\text{C}$  and long mechanical life in production environments.

The solution has succeeded in outperforming the existing compatible solution in the field.

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 Conditioning Channel) Technology	Excellent thermal stability
Temperature testing of $-60^{\circ}\text{C}$ to $180^{\circ}\text{C}$	Reliable temperature test with single piece pin construction
Loadboard Friendly	No mechanical movement or wearing on loadboard pad



### Designed for

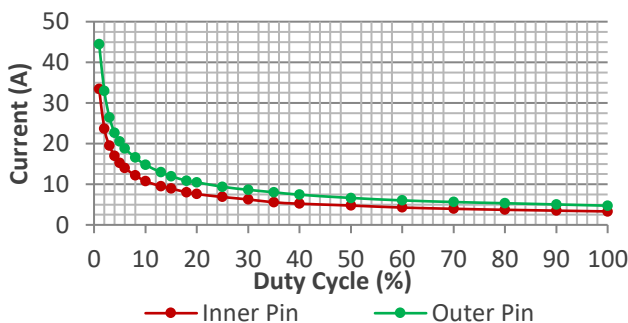


**Package Range :** SOC, SOIC, TO, SOP, QFP, QFN, TSOP, LGA, DR-QFN  
**Pitch :**  $\geq 0.4\text{mm}$

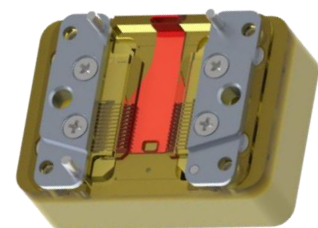
Electrical Specifications <sup>①</sup>	Hercules Inner	Hercules Outer
Self Inductance (nH)	14.38 (Kelvin) *	
Mutual Inductance (nH)	10.82 (Kelvin) *	
Ground Capacitance (pF)	3.66 (Kelvin) *	
Mutual Capacitance (pF)	3.40 (Kelvin) *	
Contact DC Resistance (mΩ)	≤ 35 *	
Current Carrying Capacity (A) Duty Cycle 100% (300ms)	3.5 *	4.7 *
Current Leakage (pA) @ 10V	≤ 1 *	

① Based on Hercules Contact with 0.5 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 per kelvin ~ 0.07 per pin
Gram Force per Contact (g)	30 ~ 50
Number of Insertions – Housing	2M
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 - NiAu



CCC Chart @ 0.2mm thickness of pin



TCC Technology – Excellent thermal stability

**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.

Sales & Service Representatives