

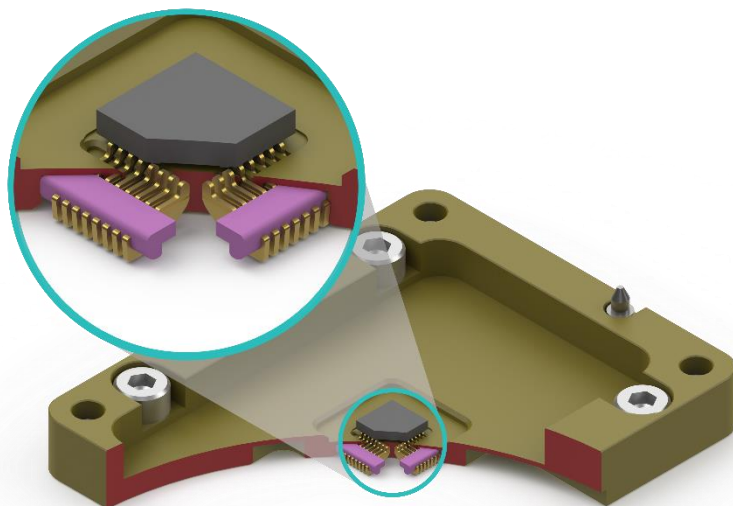
# EZ CONTACT™ TEST CONTACTING SOLUTION

(PATENT NO. 10,018,652, CIP)

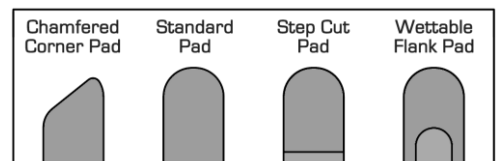
## FOR ANALOG / RF / MMWAVE DEVICE TESTING

The EZ Contact High Performance Test Contacting Solution designed and validated for initial lab characterization through high-volume production test environments. The EZ Contact technology is a proprietary short rigid contacting solution with a single multifunctional elastomer for biasing and controlling contact motion. EZ Contact technology encompasses the patented technology of SWS (Short Wiping Stroke) along with ACF (Advanced Contact Finishing) and TCC (Thermal Conditioning Channel) Technology to meet your most demanding High Performance Electrical and Mechanical Test Requirements. Product is easily integrated into most IC Handler platforms.

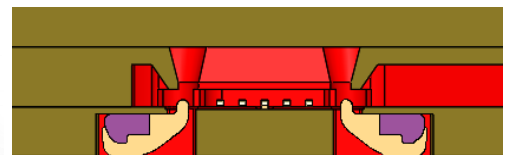
Key Features	EZ Contact Technology Delivers
Single Multifunctional Elastomer	Easy Installation, Inventory and Cost Reduction, Consistent/ Controlled Contact Motion, Consistent CRes, Longer MTBA
Short Electrical Length	Superior Signal Performance
No Contact Pin Engagement with Back Wall of Socket Housing	No Wearing of the Socket Housing, Extended Lifespan
SWS (Short Wiping Stroke) Technology	Ideal for Short Pads, Chamfered Corner Pads, and Wettable Flank and Step Cut Styles
ACF (Advanced Contact Finishing) Technology	Loadboard Friendly, Minimizes Debris, Prolonged Cleaning
TCC (Thermal Conditioning Channel) Technology	Maintains Thermal Set Point of Device during Test Process



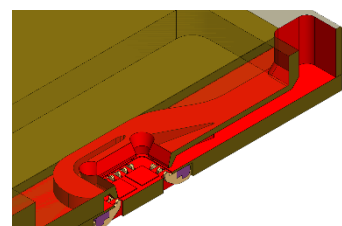
### Design Features



Suitable for above Pad Styles



SWS Technology



TCC Technology – Maintain Thermal Set Point

Package Styles : SOIC, SOP, QFP, QFN, TSOP, LGA

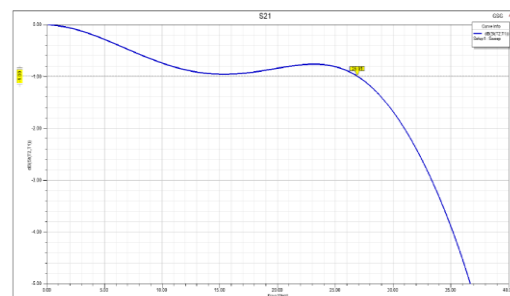
Pitch :  $\geq 0.3\text{mm}$

Available in Non-Kelvin Configurations

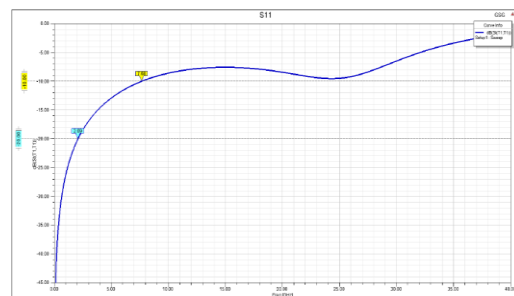
Electrical Specifications	EZ - 1	EZ - 2 ①
Self Inductance (nH)	0.373 *	0.771 *
Mutual Inductance (nH)	0.150 *	0.438 *
Ground Capacitance (pF)	0.059 *	0.256 *
Mutual Capacitance (pF)	0.031 *	0.192 *
S21 (Insertion Loss / Bandwidth)	-1dB @ 30~50GHz *	-1dB @ 26.91GHz *
S11 (Return Loss / Bandwidth)	-20dB @ 10~20GHz *	-20dB @ 2.09GHz *
S41 (Crosstalk / Bandwidth)	-20dB @ 10~20GHz *	-20dB @ 10.48GHz *
Contact DC Resistance (mΩ)	≤ 25 *	
Current Carrying Capacity (A) Duty Cycle 100%	4.8*	7.5 *
Current Leakage (pA) @ 10V	≤ 1 *	

Mechanical Specifications	EZ - 1	EZ - 2
Contact Uncompressed (mm)	0.925	1.6
Contact Compliance (mm)	0.175	0.2
Contact Tip Coplanarity (mm)	± 0.05 *	
Contact Wiping Length (mm)	~ 0.1 *	
Gram Force per Contact (g)	25 ~ 35 *	30 ~ 40 *
Number of Insertions - Housing	10M *	
Number of Insertions - Elastomer	~ 300K *	
Number of Insertions - Pin (Matte Tin)	300K ~ 500K *	
Number of Insertions - Pin (NiPd)		
Operating Temperature (°C)	-45 ~ 155	
Socket Material	Torlon® 5030 or equivalent	
Contact Pin Material	BeCu-Ni-Au	

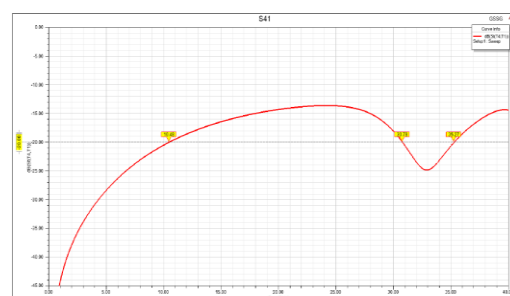
## EZ-2 Performance



S<sub>21</sub> Insertion Loss ②



S<sub>11</sub> Return Loss ②



S<sub>41</sub> Crosstalk ②

## Grounding Options

Bell Contact (BC)	Hinged Contact Insert (HCI)	EZ Contact	Ground Block with Contact(s)
≥ 2x2	≥ 3x3	≥ 5x5	≥ 2x2 (with BC) ≥ 3x3 (with HCI) ≥ 5x5 (with EZ)
			

① Based on EZ-2 Contact with 0.50mm pitch

② Simulated Results

**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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