

Test & Connector Applications

Multi-GHz Bandwidth Capability

All Metal Contact - No Elastomers

Down to .4mm Contact Pitch

Durability for High Volume Applications

.95mm Test Height

Short Lead Times for Custom Designs

Easily Replaceable Contacts

Offered in a broad range of standard and custom designed connectors for flex connection where RF performance is paramount, RC Scrub-R technology provides excellent oxide penetration with its linear wiping action. Made from unplated semi-precious metal, the RC Scrub-R is resistant to wear. RC Scrub-R Technology is a reliable discrete node, z-axis interconnect solution for high speed applications.

Ardent Concepts is focused on increasing electrical efficiencies and reducing connector costs. Ardent's RC Scrub-R technology is robust, scalable, and cost effective. This extremely versatile compliant contact technology increases RF accuracy, lowers connector cost, and provides reliable performance from development to production.

Features

- Patented Compliant RC Scrub-R Contacts
- Discrete Node All-Metal Interface
- Low Self-Inductance
- Consistent Resistance

Electrical Specifications

Self Inductance	0.5	nH
Isolation	-1dB	@ 20 GHz
Average Contact DC Resistance	30	milliohm (Plated BeCu)
	60	milliohm (Paliney-7)
Nearest Decoupling Area	0.039 in	1.00 mm

Mechanical Specifications

Free Length	0.046 in	1.156 mm
Test Height	0.038 in	0.953 mm
Travel	0.008 in	0.203 mm
Translation	0.004 in	0.102 mm
Contact Force	.6-1.0 oz	17-28 g
Tip Coplanarity	0.0014 in	0.04 mm
Environmental	-40 to 155 °C	
Housing Life	>1,000,000	cycles
Contact Life	>100,000	cycles

US Patent # 7,019,222.. Other US & Foreign Patents Pending

Benefits

- Oxide Penetrating X-Y Scrubbing Action
- Highly Reliable Contact & Long Life
- Better Signal Integrity
- Known Discrete Node Resistance Measurements

Options

Contact Material	BeCu 25HT, Paliney-7
Manual Actuator	Micro Adjustable, Clip-On, Micro-Probe
Housing	Vespel, Torlon, Ultem, LCP

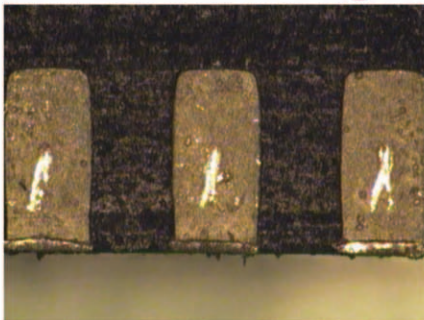
Other Resources

Ardent Concepts can provide a full range of design services for custom requirements

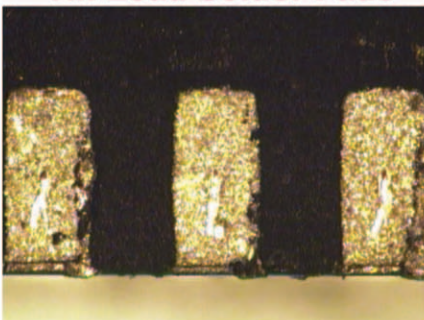
All RC Scrub-R products are field service ready. Ardent Concepts offers comprehensive information on contactor refurbishment and provides refurbish services on request.

Detailed Information on Ardent Concepts products is available for download at www.ardentconcepts.com.

Witness Mark Images



Tin Lead Solder Pads



RoHS Compliant Pads

Figure 1: SC05-03 Insertion Loss through 40 GHz.

