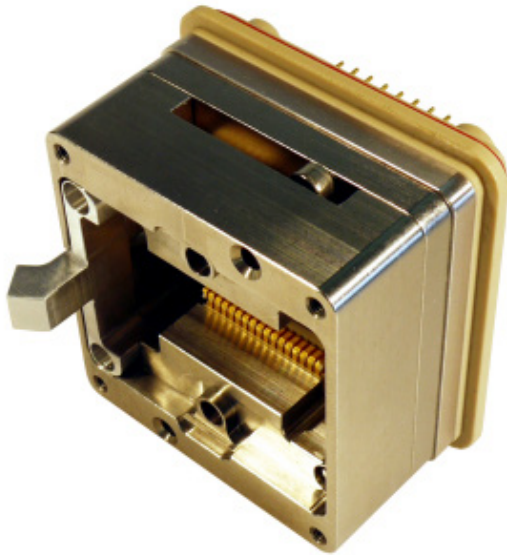


ecoAmp Kelvin Contactor

Cantilever Contactor for High Power Applications



Automotive / Power



Mobility



Precision Analog / Sensors



High End Digital



RF

Benefits

- Boosted first pass yield
- Enhanced production reliability
- Testing at full specification values
- Improved Overall Equipment Efficiency (OEE)
- Extended maintenance intervals
- Reduced cost of test

Key Features

- Developed for highest current requirements
- Patented spring and tip geometry for optimized heat dissipation
- Contact motion decoupled from the test board
- Proven self-cleaning wipe
- Durable monolithic pin design
- Low and stable contact resistance
- Extended Automotive temperature range
- Available for strip testing

- Temperature range 60°C to +175°C
- Pitches down to 0.50 mm

- Maximum peak current: 160 A @ 1 % duty cycle³
- Maximum continuous current 8 A

ecoAmp Kelvin Contactator

Cantilever Contactator for High Power Applications

Specifications

Packages and Applications

- Packages
 - Leaded and leadless
 - SO, QFP, TO, DPAK, power modules
 - Minimum lead pitch 0.5 mm
- Test Handlers
 - All handler types

Environmental

- Temperature Range
 - -60°C to +175°C

Reliability

- Contact Spring Lifespan¹
 - 1 Mio. + insertions

Electrical

- Bandwidth
 - 0.35 GHz @ -1 dB (dual, GSG 0.5 mm pitch)
 - 0.8 GHz @ -1 dB (dual, GSG 1.27 mm pitch)
- Loop Inductance
 - 2.3 nH (dual, GSG 0.5 mm pitch)
 - 4.5 nH (dual, GSG 1.27 mm pitch)
- Typical Contact Resistance²
 - Hard gold coating: 30 mΩ
 - Forta: 30 mΩ
- Current
 - Maximum peak current: 160 A @ 1 % duty cycle³
 - Maximum continuous current: 8 A

Mechanical

- Contact Spring Type
 - Cantilever / single piece
- Contact Spring Force
 - 1.3 N/pair – 3.2 N/pair (application dependent)
- Standard Test Height
 - Application dependent

Materials

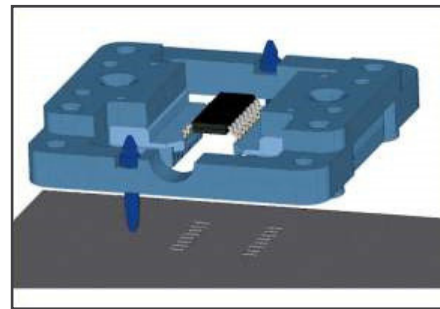
- Contact Spring Material⁴
 - CuBe
- Contact Spring Coating⁴
 - Hard gold coating
 - Dura
 - Forta

Configurations / Interface Options

- Plunge to Board
 - Thermal insulation available

Technical Standards

- Compliant to
 - ISO 9001 : 2000



¹ Electrical resistance increase due to contamination not covered

² Typical resistance measured between Au plated sheets

³ Based on 1 sec cycle time and 20°C temperature rise

⁴ Other base materials and coatings on request

All specifications are subject to change without notification and are for reference only. Use contactor drawing to design interface hardware. For detailed performance specifications, please contact Cohu.