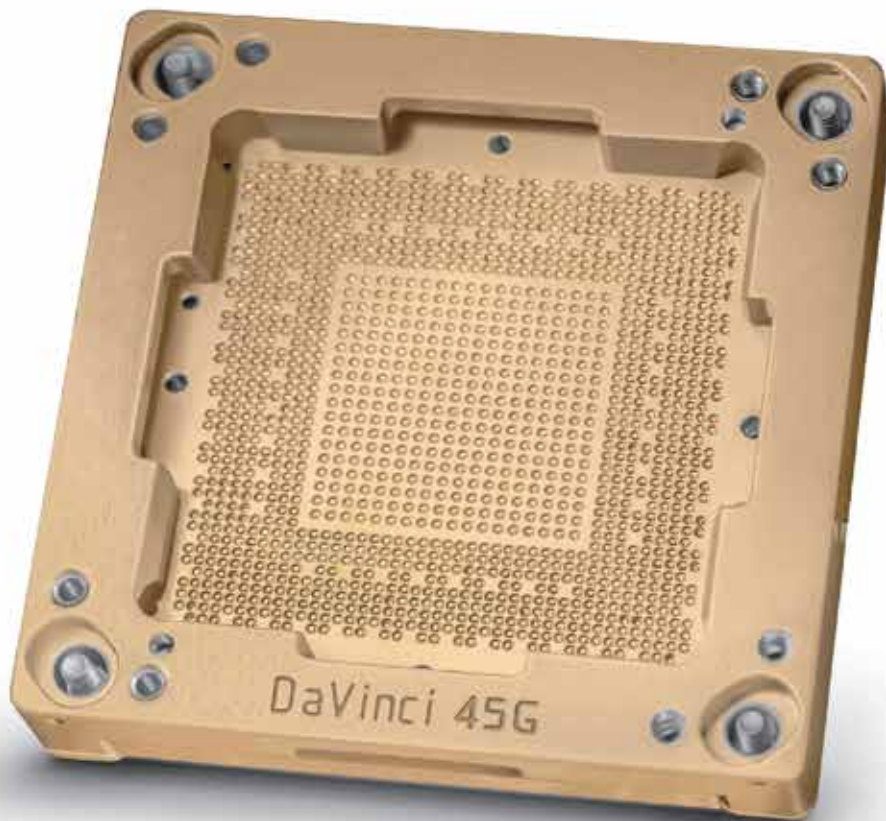


DaVinci 45G

Test Socket

Impedance Controlled Coaxial Socket for High Speed Test



Features & Benefits

DaVinci Technology

- High performance coaxial socket
- Proprietary insulated metal socket
- Spring probe simplicity
- Easily configurable
- Field maintainable

Superior Durability

- Entire signal path shielded
- Insensitive to temperature and humidity
- Extreme rigidity(very low deflection rate)

Quality Material & Unique Design

- Proprietary, patented insulated metal [IM] body
- IM or engineered plastic IC package alignment guide option
- Customized footprint
- Customized component clearance at the bottom side of the socket

Excellent Thermal Property

- Metal socket with efficient heat transfer
- Additional air channel options
- High current carrying capacity

Single-Ended Probe

- Compliant spring probe with long cycle life
- Long lasting stable coaxial structure for high speed signals
- Efficient grounding

The Next Generation of Test Solutions

The DaVinci 45G test socket is a superior coaxial socket design for reliable high speed test. The patented technology provides excellent electrical performance and the new structure provides low power inductance, higher current carrying capacity and minimal contact resistance. Smiths Interconnect’s engineering and testing capabilities ensure design validation, RF measurements, custom electrical and mechanical simulations.

Smiths Interconnect’s best-in-class engineering, test development expertise and commitment to excellence allow us to continuously invest in innovative technologies and solutions for the testing requirements of next generation devices.

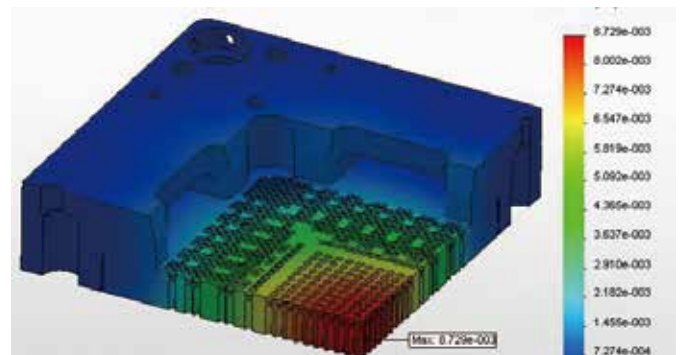
IC End Applications

- Communication
- Computer
- Automobile
- Defense
- Industrial | Medical
- Game consoles
- AI & Deep learning

Mechanical Performance

Super rigid IM material provides least deflection

Material	IM Material	Peek Ceramic	MDS-100
Max Deflection	0.009mm	0.085mm	0.046mm



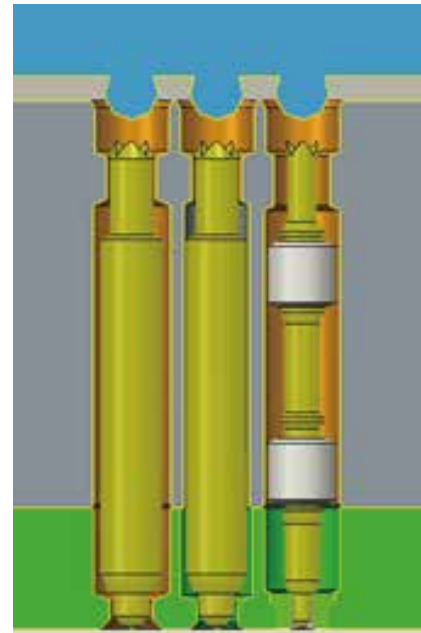
Technical Characteristics

Mechanical & Environmental

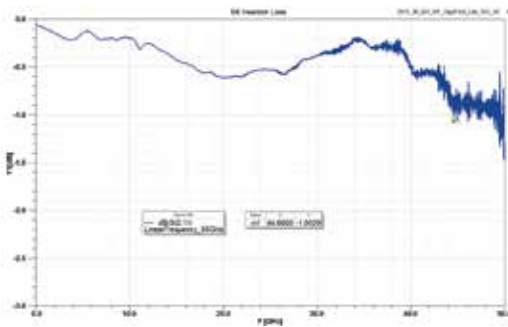
Minimum Pitch	0.7 mm
Compliance / Travel	0.50 mm
Operating Temperature	-55 to 120 °C
Life Span	>200,000

Electrical

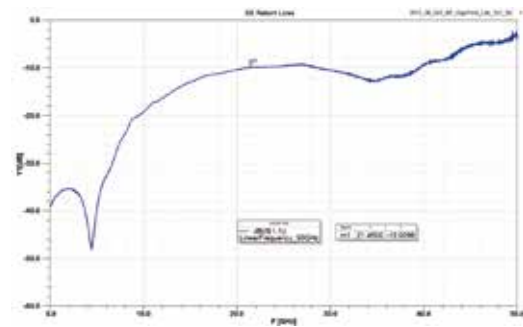
Loop Inductance	0.2 nH
Mutual Capacitance	0.15 pF
Contact Resistance	80 mΩ
Current Capacity	3.0 A
Bandwidth	45 GHz / 26 Gbps



Bandwidth & Frequency Response



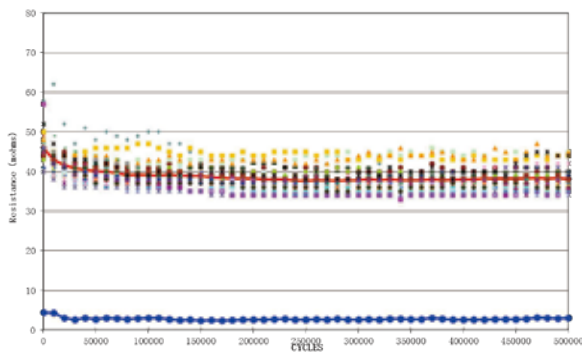
Insertion Loss (S21)
40GHz @ -1 dB, 0.8mm Pitch



Return Loss (S11)
40GHz @ -10 dB, 0.8mm Pitch

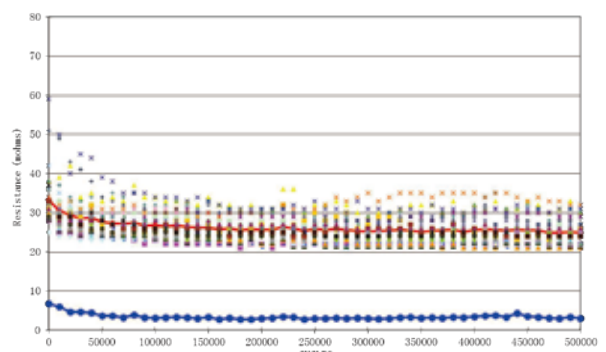
Contact Resistance

Signal Pin



500k Endurance Test

Power & Ground



500k Endurance Test

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