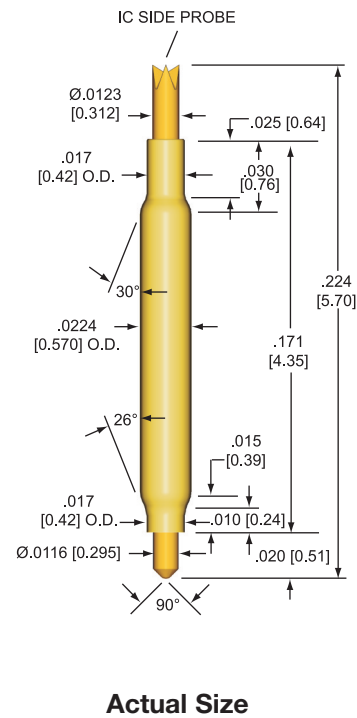


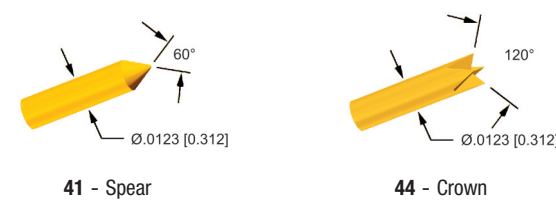
M08-PRH89 Series

The **M08-PRH89 series probes** are designed for 0.8 mm standard and custom socket applications. The probe tube must be captured in the socket while the interface plunger remains compressed. The DUT plunger is stroked with each actuation. The interface plunger is typically compressed and fixed at approximately .008 [0.20].

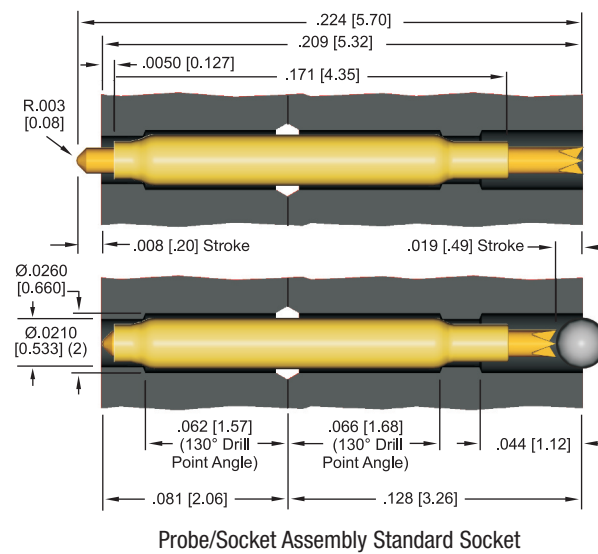
Probe



Point Styles for IC Side Only



Probe/Socket Mounting Configurations



High Frequency Testing

The high frequency performance of a test contactor is of great importance in high speed test applications. QA Technology has made high frequency measurements on a surrogate test contactor populated with our probes. A microwave network analyzer and custom test fixturing was used to test the contactor in the following configurations. Equivalent circuit model data extraction provided by GigaTest Labs®. Contact QA for additional information regarding the full GigaTest® report.

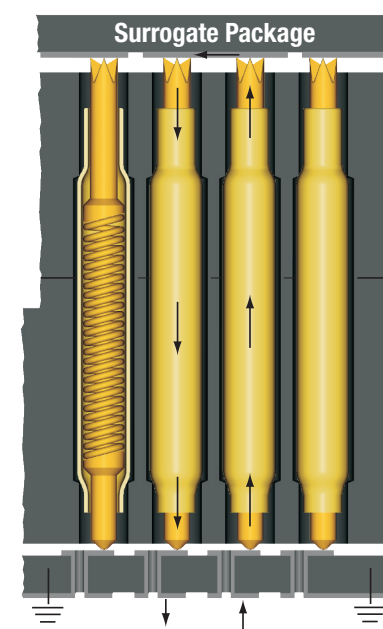
For the Loop-Thru measurement, the test signal travels through the test board via and the first probe to the surrogate package. The isolated trace

on the surrogate package couples the signal to the adjacent probe where it is returned back through the second test board via. All the probes surrounding the two signal carrying probes are grounded.

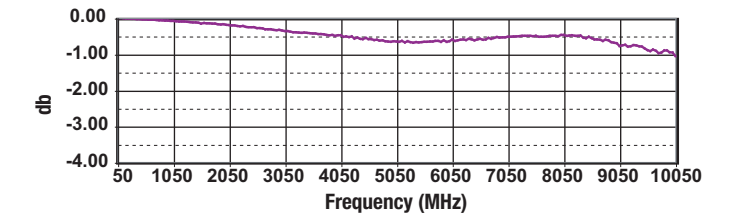
The configuration for the Crosstalk and S₁₁ Open measurements are similar, except that the surrogate package does not connect the two probes under test. The coupling between them is primarily capacitive, and it is this coupling effect that is measured.

For the S₁₁ Short measurement, the surrogate package shorts the probes under test and the surrounding ground pins together.

S₂₁ Loop-Thru Contactor Configuration

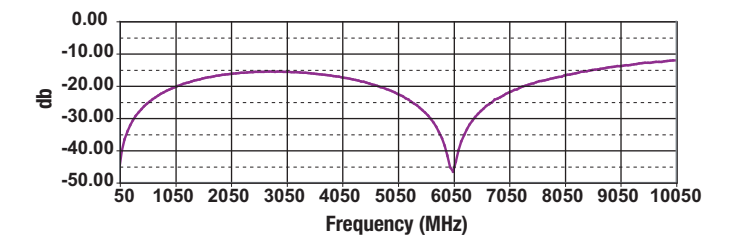


Insertion Loss – S₂₁ Loop-Thru



Bandwidth: -1 db @ 10.0 GHz
Self Inductance: 1.13 nH

Crosstalk – S₂₁ Open



M08 - PRH89 ■ ■ ■ ■

example: M08 - PRH8944SL

TUBE	Letter	Material/Finish	Average Resistance			
	H	Copper Alloy/ID and OD gold clad	< 30 milliohms			
POINT	Digits	Material/Finish				
	See Points	Heat-treated BeCu/gold plated				
SPRING	Letter	Material/Finish	Preload	@ .027 [.69] Stroke	Mechanical Life @ .027 Stroke	Compliance
	S	Stainless Steel/gold plated	.33 [9.4]	.88 [25]	1,000,000	.035 [.89]
OPTION	Letter	Description				
	L	Lubricated (Operating temp -50°F to 250°F [-45°C to 120°C])				

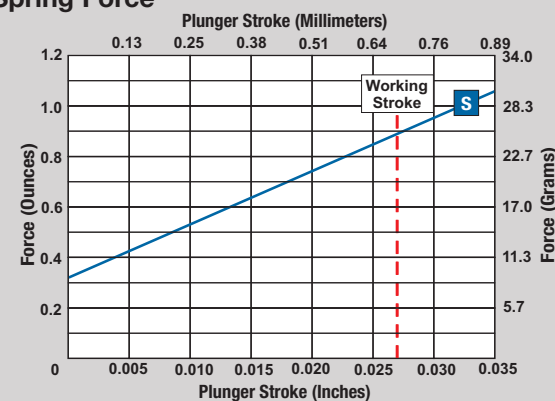


Probe Specifications

Mechanical

Full stroke: DUT side .019 [0.48]; Interface side .008 [0.20]
Working stroke: up to .027 [0.69] (includes both plungers)
Operating temp.: Up to 400°F [204°C]
Current rating (for single probe in ambient air with 70°F [20°C] rise): 4.5 Amps

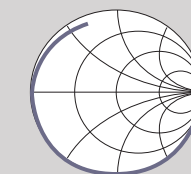
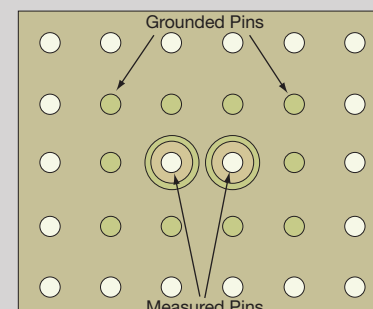
Spring Force



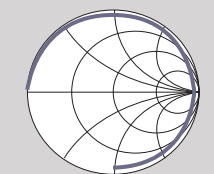
Maintenance

Easy removal and replacement with the use of tweezers. To clean plunger(s); brush with a soft bristle brush. Never use a metal brush as it will damage the gold plating.

Probe/Socket Mounting Configurations



S₁₁ Open
50 MHz-10.05GHz



S₁₁ Short
50 MHz-10.05GHz