

## M-pin Probe

High performance probe for high current, high frequency, and high-temp circumstance.  
For burn-in socket, test socket, and board to board.







### Specification

Temperature range: -40°C ~ +150°C  
Contact resistance: 50mΩ max

### Material

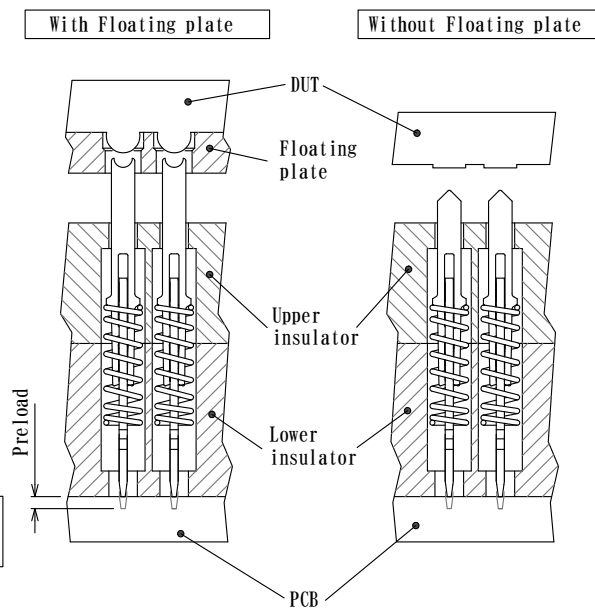
Plunger: BeCu, Gold over Ni plated  
Spring : Stainless Steel, Gold over Ni plated

Head style	Target objects
point 	Pad Land (LGA) Pin Lead (QFP, SOP)
Full radius 	Pad Land (LGA)
U shape 	Pad Land (LGA) Pin Lead (QFP, SOP) BGA CSP
V shape 	Pad Land (LGA) Pin Lead (QFP, SOP) BGA CSP

reference)

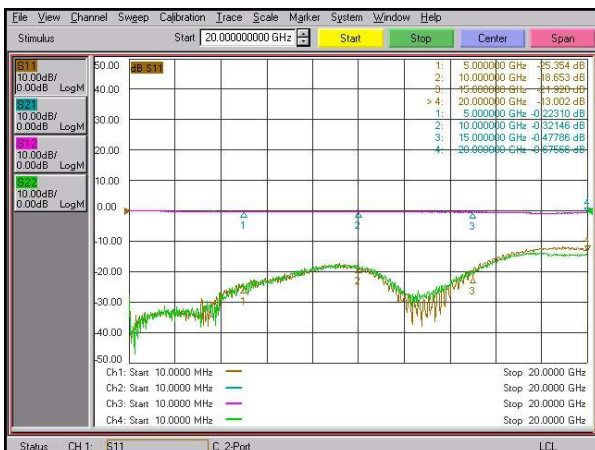
Component drawing

### How to use



### High frequency characteristic

Return loss ————  
Insertion loss ————  
Test sample P/N MD59L301R-029N  
pitch:0.8mm

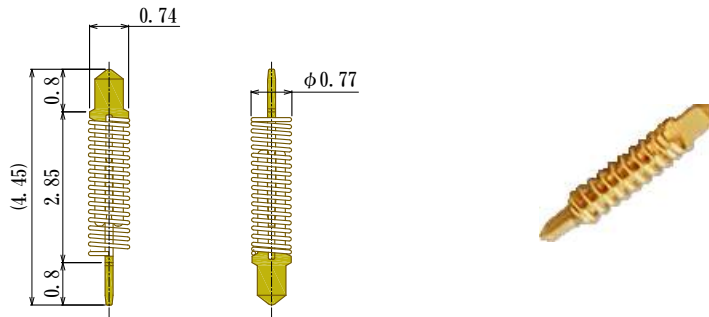


-0.68dB:20GHz  
-13dB:20GHz

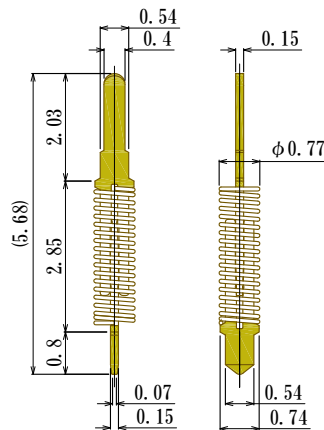
M-pin probe  
Our product lineup utilizing M-pin probe

M-pin Probe Assy, for Board to Board ——— Please refer to page 3C1.

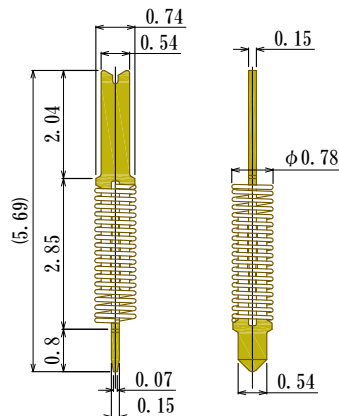
M-pin Probe Outer Dia.  $\phi 0.77 \sim 0.78\text{mm} / 0.030 \sim 0.031"$   
1.0mm pitch, etc.



Part No.	Preload	Recommended travel	Current rating
<b>MD77L445C-019N</b>	0.1N (10.1gf)	0.166N (17.0gf) at 0.5mm travel	4A
<b>MD77L445C-034N</b>	0.18N (18.1gf)	0.295N (30.1gf) at 0.5mm travel	4A

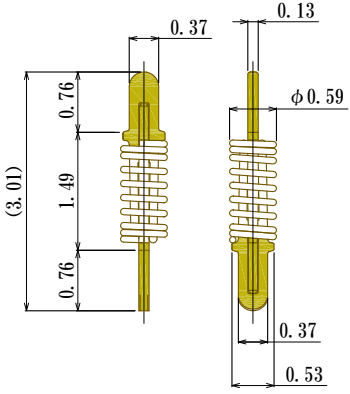
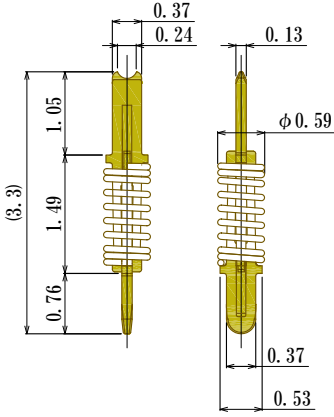
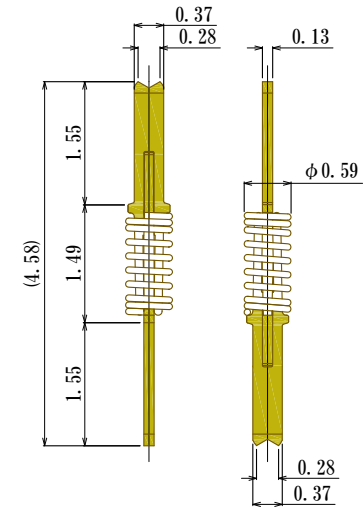


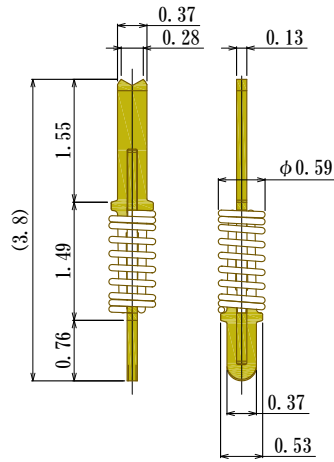
Part No.	Preload	Recommended travel	Current rating
<b>MD77L568R-019N</b>	0.1N (10.1gf)	0.166N (17.0gf) at 0.5mm travel	4A
<b>MD77L568R-034N</b>	0.18N (18.1gf)	0.295N (30.1gf) at 0.5mm travel	4A



Part No.	Preload	Recommended travel	Current rating
<b>MD78L569V-019N</b>	0.1N (10.1gf)	0.166N (17.0gf) at 0.5mm travel	4A
<b>MD78L569V-034N</b>	0.18N (18.1gf)	0.295N (30.1gf) at 0.5mm travel	4A

M-pin Probe Outer Dia.  $\phi 0.59\text{mm}/0.023''$   
0.8mm pitch, etc.

 <p>Preload 0.09N (9.4gf) 0.254N (25.9gf) at 0.4mm travel Current rating 3A</p> <p><b>MD59L301R-029N</b></p> <p>0.8mm pitch, etc.</p>	 <p>Preload 0.09N (9.4gf) 0.254N (25.9gf) at 0.4mm travel Current rating 3A</p> <p><b>MD59L33U-029N</b></p> <p>0.8mm pitch, etc.</p> <p>*Limited quantity</p>	 <p>Preload 0.09N (9.4gf) 0.254N (25.9gf) at 0.4mm travel Current rating 3A</p> <p><b>MD59L458V-029N</b></p> <p>0.8mm pitch, etc.</p>
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Part No.	Preload	Recommended travel	Current rating
<b>MD59L38V-015N</b>	0.06N (5.7gf)	0.151N (15.4gf) at 0.4mm travel	3A
<b>MD59L38V-029N</b>	0.09N (9.4gf)	0.254N (25.9gf) at 0.4mm travel	3A

0.8mm pitch, etc.

M-pin Probe Outer Dia.  $\phi 0.38\text{mm}/0.015''$   
0.5mm pitch, etc.

Preload 0.21N (21.2gf)  
0.281N (28.6gf) at 0.33mm travel  
Current rating 2.9A

**MD38L295C-030N**  
0.5mm pitch, etc.

Preload 0.21N (21.2gf)  
0.281N (28.6gf) at 0.33mm travel  
Current rating 2.9A

**MD38L34U-030N**  
0.5mm pitch, etc.

\*Limited quantity

Preload 0.21N (21.2gf)  
0.281N (28.6gf) at 0.33mm travel  
Current rating 2.9A

**MD38L348C-030N**  
0.5mm pitch, etc.

Preload 0.21N (21.2gf)  
0.281N (28.6gf) at 0.33mm travel  
Current rating 2.9A

**MD38L385V-030N**  
0.5mm pitch, etc.

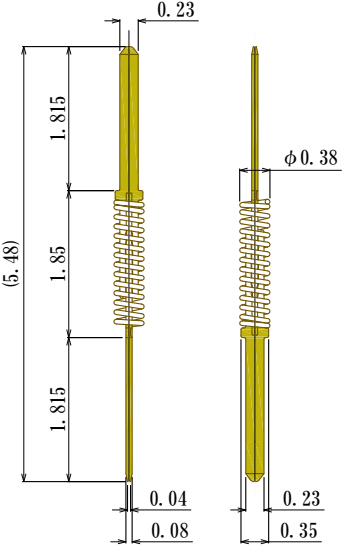
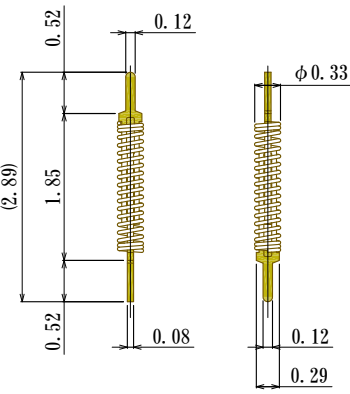
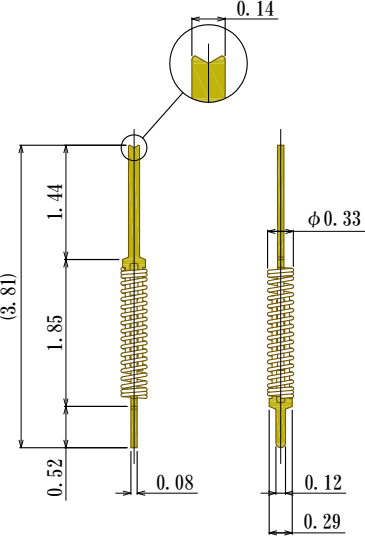
Preload 0.21N (21.2gf)  
0.281N (28.6gf) at 0.33mm travel  
Current rating 2.9A

**MD38L448C-030N**  
0.5mm pitch, etc.

Preload 0.21N (21.2gf)  
0.281N (28.6gf) at 0.33mm travel  
Current rating 2.9A

**MD38L476V-030N**  
0.5mm pitch, etc.

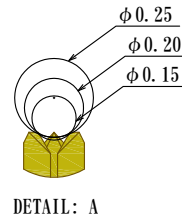
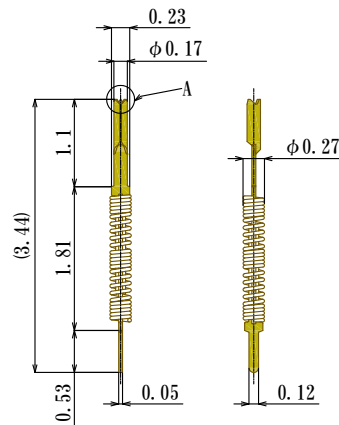
**M-pin Probe Outer Dia.  $\phi 0.33 \sim \phi 0.38\text{mm} / 0.013 \sim 0.015"$   
0.4~0.5mm pitch, etc.**

 <p>Preload 0.21N (21.2gf) 0.281N (28.6gf) at 0.33mm travel Current rating 2.9A</p> <p><b>MD38L548C-030N</b> 0.5mm pitch, etc.</p>		
 <p>Preload 0.06N (6.6gf) 0.129N (13.2gf) at 0.3mm travel Current rating 1.8A</p> <p><b>MD33L289R-014N</b> 0.4mm pitch, etc.</p>	 <p>Preload 0.06N (6.6gf) 0.129N (13.2gf) at 0.3mm travel Current rating 1.8A</p> <p><b>MD33L381V-014N</b> 0.4mm pitch, etc.</p>	

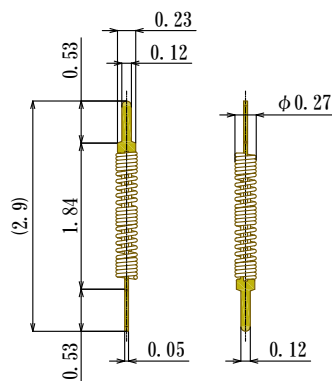
**M-pin Probe    Outer Dia.  $\phi 0.27\text{mm}/ 0.010''$   
0.35mm pitch**

Material  
Plunger: BeCu, Gold over Ni plated  
Spring : Stainless Steel, Gold over Ni plated

Specification  
Spring force : 0.078N (8.0gf) at 0.3mm travel  
Contact resistance:  $< 65\text{m}\Omega$   
Temperature range :  $-55^{\circ}\text{C} \sim +135^{\circ}\text{C}$   
Current rating : 0.5A



**MD27L344W-009N**



**MD27L29R-009N**