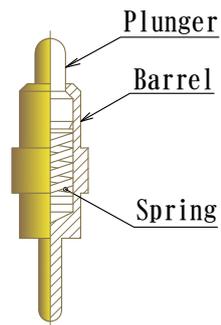


8Y Series Spring Probes

○The typical use is as follows.

Battery charger.
Substrate board measurement.
Image (Video, VTR)
The terminal for signals
Head phone stereo, The battery terminal or for signal terminals of radio.
Communication (Walkie-talkie, Mobile phone, etc)
Others.



Electrical Specifications

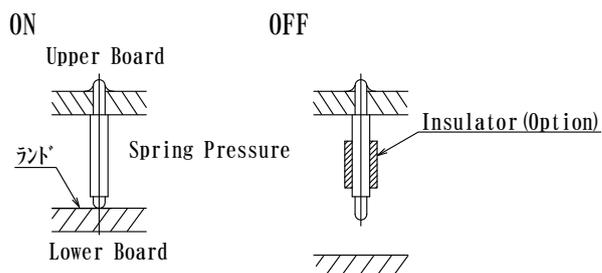
Contact resistance : 50mΩ max

Temperature Range : -20°C ~ +85°C

(Some probes may have different specifications)

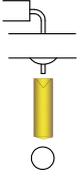
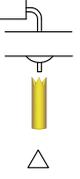
Materials (typical type)

P/N	Materials	Plating
Plunger	Beryllium Copper Brass Phosphor Bronze Steel Palladium Alloy	Gold : (Electrical conductivity) Gold Flash : (Low cost) Nickel : (Corrosion resistance) Ag : (Low contact resistance) Palladium : (Wear resistance)、(Corrosion resistance) Rhodium : (Wear resistance)
Barrel	Brass Phosphor Bronze Ni Alloy DuraGold	Gold : (Electrical conductivity) Gold Flash : (Low cost) Nickel : (Corrosion resistance) Ag : (Low contact resistance)
Spring	Music Wire Beryllium Copper Stainless Wire	Gold : (Electrical conductivity) Gold Flash : (Low cost) Nickel : (Corrosion resistance)



Plunger head style and Target objects

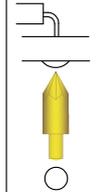
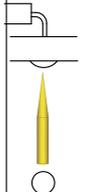
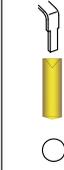
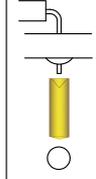
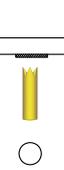
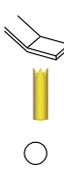
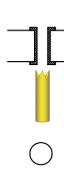
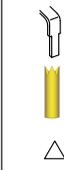
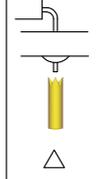
○ suitable × unsuitable △ depending on other conditions

Plunger head style	Pad Land	Pin Lead	Thru Hole	BGA CSP	End of Long lead	Soldering point	Self cleaning	Other features
							Scratches	
Circular cone 	 ○	 ○	 ○	 ○	×	 ○	Yes	Insulating coating can be penetrated because this style has an acute angle. Abrasion becomes big if the target object is hard.
Sharp Pointer 	 ○	 ○	 △	 ○	×	 ○	Yes	Insulating coating can be penetrated because this style has an acute angle. Abrasion becomes big if the target object is hard. Contact resistance is comparatively high because it has only one point contact.
Concave 	 ○	 ○	 △	 △	 ○	 ○	Free	Make this contact with the target object as if leading out its pin shape. Contact becomes unstable if insulating coating exists.
Crown 	 ○	 ○	 ○	 ○	 △	 △	Depending on Loading	This style is used when there is a certain degree of insulating coating. Contact varies if the target object is hard.

(Note) There are just rough standards, and they may vary depending on the material and shapes.

Plunger head style and Target objects

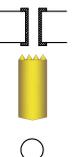
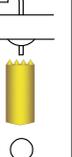
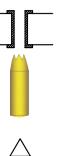
○ suitable × unsuitable △ depending on other conditions

Plunger head style	Pad Land	Pin Lead	Thru Hole	BGA CSP	End of Long lead	Soldering point	Self cleaning	Other features
							Scratches	
Circular cone 	 ○	 ○	 ○	 ○	 ×	 ○	Yes	Insulating coating can be penetrated because of this style has an acute angle. Abrasion becomes big if the target object is hard.
Sharp Pointer 	 ○	 ○	 △	 ○	 ×	 ○	Yes	Insulating coating can be penetrated because of this style has an acute angle. Abrasion becomes big if the target object is hard. Contact resistance is comparatively high because it has only one point contact.
Concave 	 ○	 ○	 △	 △	 ○	 ○	Free	Make this contact with the target object as if leading out its pin shape. Contact becomes unstable if insulating coating exists.
	 ○	 ○	 ○	 ○	 △	 △	Depending on Loading	This style is used when there is a certain degree of insulating coating. Contact varies if the target object is hard.

(Note) There are just rough standards, and they may vary depending on the material and shapes.

Plunger head style and Target objects

○ suitable × unsuitable △ depending on other conditions

Plunger head style	Pad Land	Pin Lead	Thru Hole	BGA CSP	End of Long lead	Soldering point	Self cleaning	Other features
							Scratches	
Sharp Crown 	 ○	 ○	 ○	 ○	 △	 △	Depending on Loading	This style is used when there is comparatively thick insulating coating. If the target objects is hard, abrasion occurs early and contact performance varies.
Multipoint Crown 	 ○	 ○	 ○	 ○	 ○	 ○	Depending on Loading	This style is used when there is comparatively thick insulating coating. It can be used for hard target objects because it has multipoint contact.
Reduced Crown 	 ○	 ○	 △	 ○	 △	 △	Depending on Loading	This style is used when there are more or less soldered parts or insulating coating on circuit board. If the target object is hard, the resistance value become unstable depending on the number contact point.

(Note) There are just rough standards, and they may vary depending on the material and shapes.

How to keep good contact with Spring probe pin.

Precaution for use

1. It is necessary to prevent dust accreting by sealing or covering when it is not used.
It is also effective to cover entire equipment, such as fixtures.
2. Contact parts may be polluted because of little pieces of thread, cotton dust, cigarette smoke, etc. in the room. If the room is closed and you wonder if it is clean, you need countermeasures and attention.
3. Plating fraction may fall off from target objects, such as pads, which plungers get contact with, and adhere them. Remain of soldering flux on pc board also influences contact properties.

Maintenance of Spring Probes

To make spring probes last and gain good contact properties continuously, it is effective to do maintenance depending on the frequency of use, condition, and environment for preserving the initial performance. There are following maintenance factors.

1. Exchanging probes once every proper terms. (100,000 to 200,000cycles is rough standard.)
2. Performing cleaning work.
(Make inquiries to us about cleaning.)