



PRODUCT CATALOGUE

Leader of Semiconductor Test Solution Provider



COMPANY PARTNERS MISSION

Our Company

Established in 2004, Hyperspace is now recognized as one of the leading test probes manufacturers in the semiconductor industry. We design, manufacture and distribute a wide range of test probes for all semiconductor test applications.

Our Partners

Hyperspace selects and appoints strategically-located supply chain as our business partners globally.

They provide specialized products and services to support our offering of the best quality test probes so as to provide flexibility and the most competitive pricing to our customers.

Our customers base worldwide includes some of the well-known semiconductor design and fab-less companies, manufacturers and subcontractors.

Our Mission

We are committed to provide precise engineering, proximity location, punctuality delivery, and premium after sales service.

Our Vision

Plan and project Hyperspace to be the largest semiconductor test probe manufacturer in the region.



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TECHNOLOGY ROADMAP

XITANO SERIES



Top plunger - Barrel = 1 piece solid rod

- Traditional design: Top plunger and barrel assembled from separate components

SLATINO SERIES



Single stroke - Single action - Single piece rod production

- Traditional design: Top plunger and barrel assembled from 2 separate components

CHROMO SERIES

Gold Cladded Barrel Tube Technology

- Traditional design: PBT tube



Traditional Barrel Tube (PBT)
(Cross Section View)



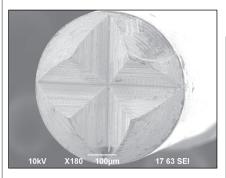
High Performance CHROMO Barrel Tube (GOLD CLADDING Technology - Cross Section View)



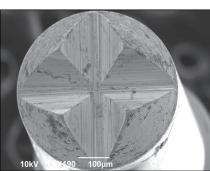
TECHNOLOGY ROAD MAP

BLACK GOLD ALLOY PLUNGER

- To prevent solder migration contamination, gold plated plungers should be avoided.
- BLACK GOLD Alloy is a homogeneous material, therefore no plating is required.
- Advantage of BLACK GOLD Alloy is its resistance to foreign deposits which can be removed easily with any soft brush available.

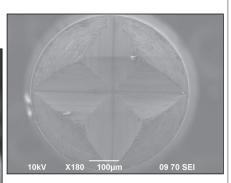


Brand New



Used





After Cleaning

HYPER ALLOY SPRING



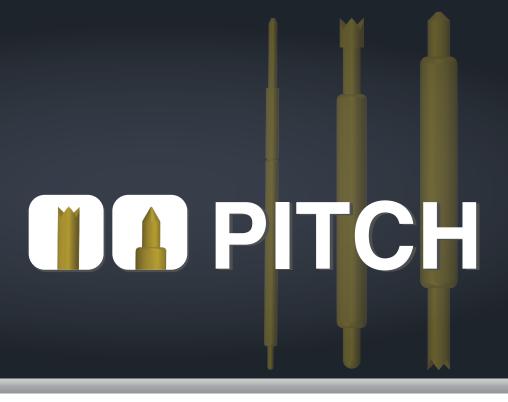
Conventional SWP/SUS Spring (Gold Plated)



Hyper Alloy Spring (No Plating)

- High temperature capability up to +155°C

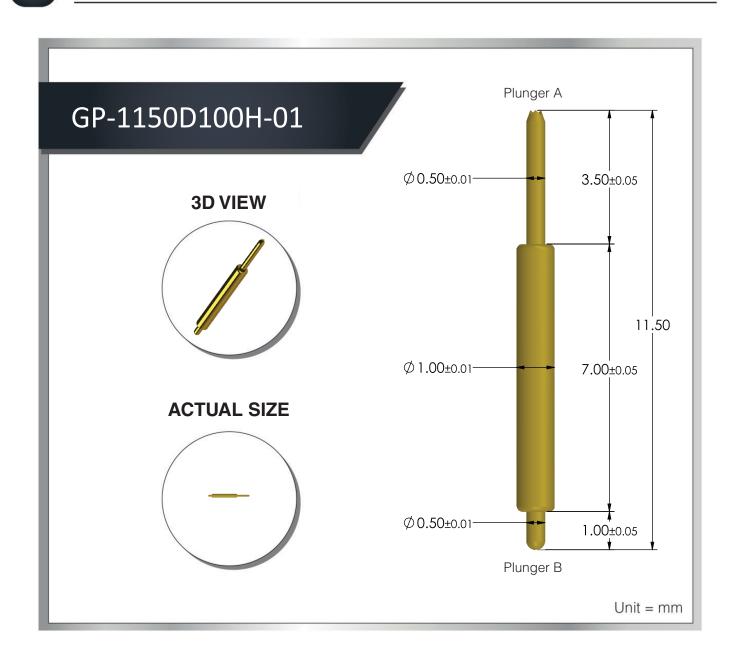
- High temperature capability up to +200°C
- No plating required



1.27mm Pitch	
GP-1150D100H-01	7
GP-2550B110B-01	8
1.00mm Pitch	
GP-570A84A-01	9
0.80mm Pitch	
GP-570D58A-01	10
GP-865C58C-04FS	_
GF-803C36C-04F3	11
0.65mm Pitch	
0.03IIIIII FILCII	
GP-480C50A-03	12
GP-480C50A-03	13
GP-480C50A-03 GP-600CC51H-01 GP-1200C50C-01	13
GP-480C50A-03 GP-600CC51H-01 GP-1200C50C-01	13 14
GP-480C50A-03GP-600CC51H-01GP-1200C50C-01 0.50mm Pitch GP-460C38H-1SA	13 14 15
GP-480C50A-03GP-600CC51H-01GP-1200C50C-01 0.50mm Pitch GP-460C38H-1SAGP-480C38B-03	13 14 15 16
GP-480C50A-03GP-600CC51H-01GP-1200C50C-01 0.50mm Pitch GP-460C38H-1SA	13 14 15 16 17

0.40mm Pitch GP-475A31C-33 GP-570A31C-1SA	
0.35mm Pitch GP-475B28C-35SA GP-570C28A-33 GP-762D28A-01XB	22
0.30mm Pitch GPZ-570C20B-1BG GP-762A21A-01XB GP-1270B20B-01	25
0.20mm Pitch GP-285B15H-BG GPZ-400A13A-2BG	

Pitch 1.27mm

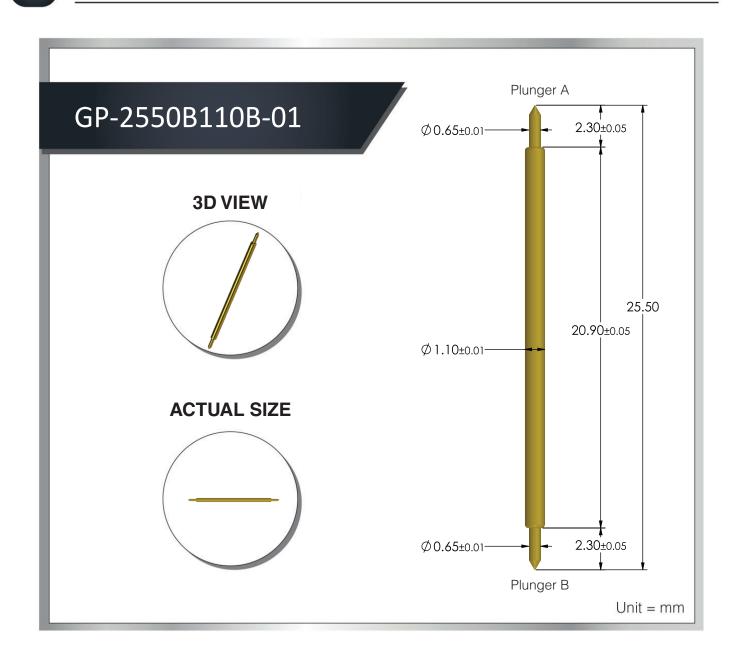


PRODUCT SPECIFICATION

Pitch 1.27mm **Rated Stroke** 1.95mm **Full Stroke** 2.60mm **Spring Force** 33gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Material	Finishing
Beryllium Copper	Gold Plated
Beryllium Copper	Gold Plated
Phosphor Bronze	Gold Plated
Music Wire	Gold Plated
	Beryllium Copper Phosphor Bronze

Pitch 1.27mm

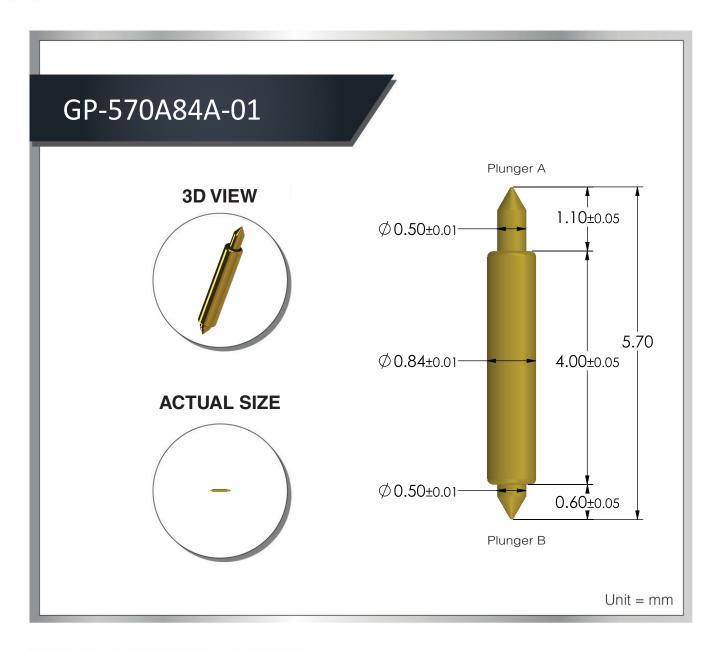


PRODUCT SPECIFICATION

Pitch 1.27mm **Rated Stroke** 2.20mm **Full Stroke** 3.60mm **Spring Force** 45gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Material	Finishing
Beryllium Copper	Gold Plated
Beryllium Copper	Gold Plated
Phosphor Bronze	Gold Plated
Music Wire	Gold Plated
	Beryllium Copper Beryllium Copper Phosphor Bronze

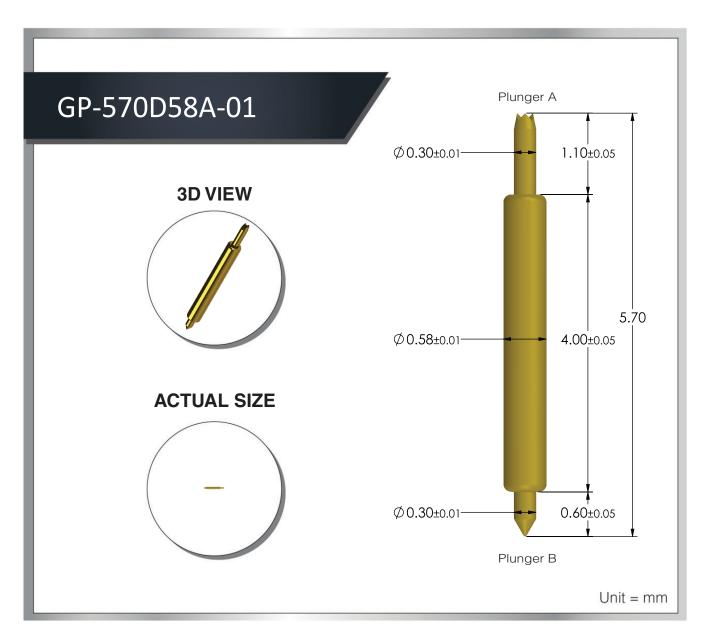
Pitch 1.00mm



PRODUCT SPECIFICATION

Pitch 1.00mm Rated Stroke 0.65mm Full Stroke 1.10mm Spring Force 25gf (±20%) at 2/3 Travel Contact Resistance < 100mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

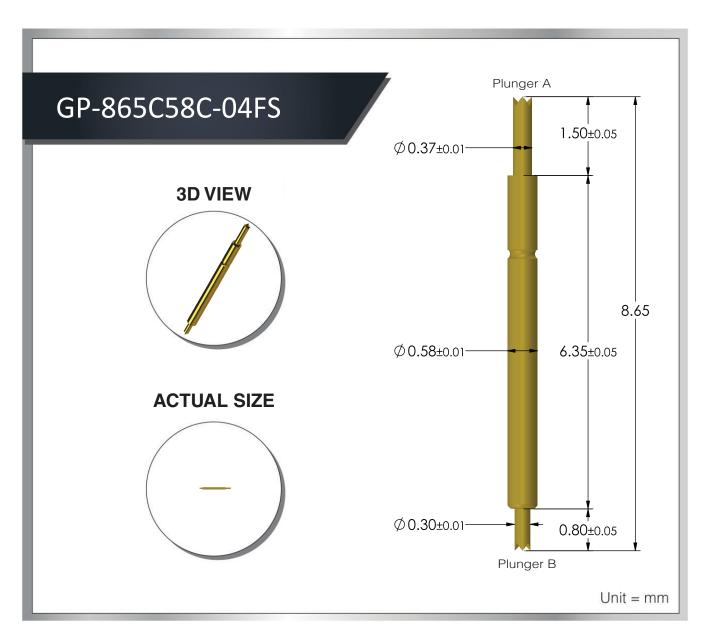
Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated



PRODUCT SPECIFICATION

Pitch 0.80mm Rated Stroke 0.65mm Full Stroke 1.10mm Spring Force 25gf (±20%) at 2/3 Travel **Contact Resistance** < 100mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

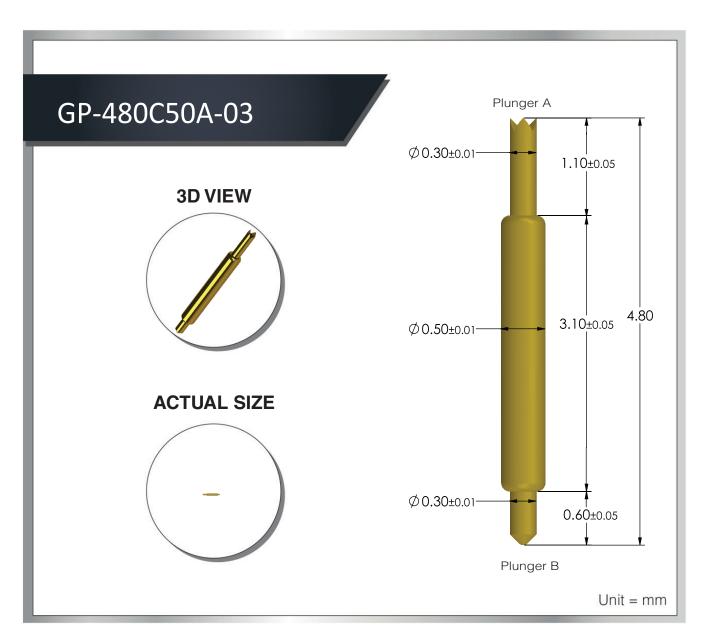
Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated



PRODUCT SPECIFICATION

Pitch 0.80mm **Rated Stroke** 0.80mm **Full Stroke** 1.00mm **Spring Force** 32gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Stainless Steel	Gold Plated

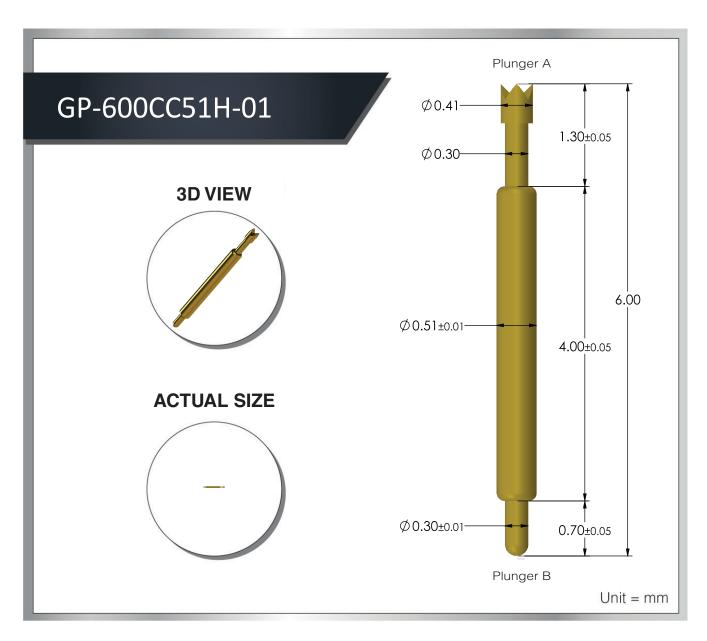


PRODUCT SPECIFICATION

Pitch 0.65mm **Rated Stroke** 0.60mm **Full Stroke** 1.00mm **Spring Force** 25gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

COMPONENT DISTRIBUTION

Material **Finishing** Group Hardened Steel **Gold Plated** Plunger A Plunger B Beryllium Copper **Gold Plated** Barrel Phosphor Bronze **Gold Plated** Music Wire **Gold Plated** Spring

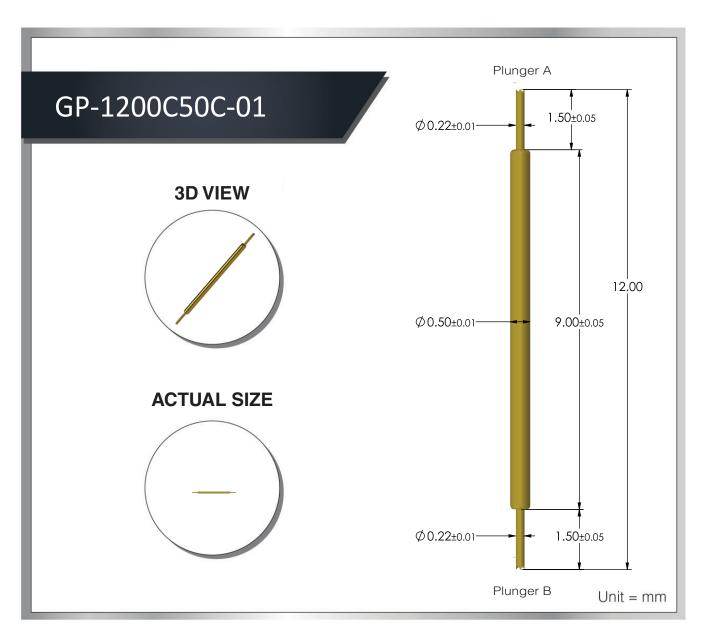


PRODUCT SPECIFICATION

Pitch 0.65mm Rated Stroke 1.10mm **Full Stroke** 1.30mm **Spring Force** 25gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous > 500,000 insertion Lifespan (Mechanical)

COMPONENT DISTRIBUTION

GroupMaterialFinishingPlunger ABeryllium CopperGold PlatedPlunger BBeryllium CopperGold PlatedBarrelPhosphor BronzeGold PlatedSpringMusic WireGold Plated

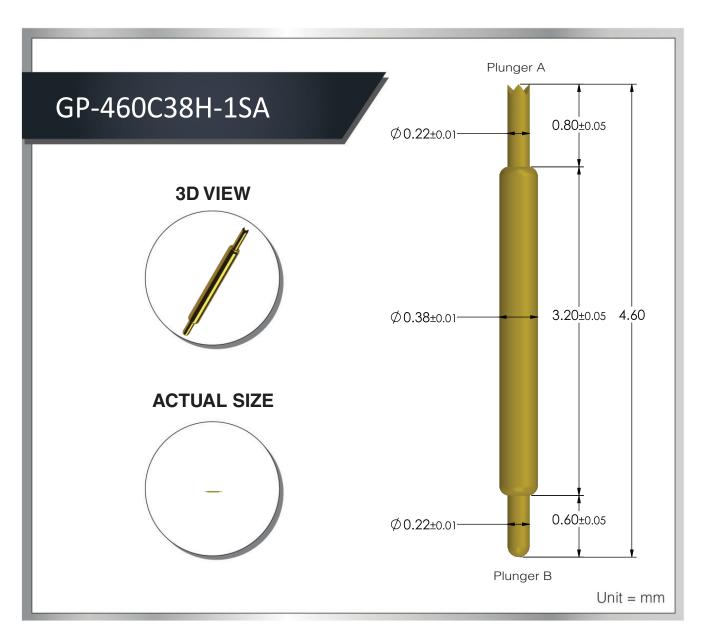


PRODUCT SPECIFICATION

Pitch 0.65mm **Rated Stroke** 0.75mm **Full Stroke** 1.30mm **Spring Force** 28gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous > 500,000 insertion Lifespan (Mechanical)

COMPONENT DISTRIBUTION

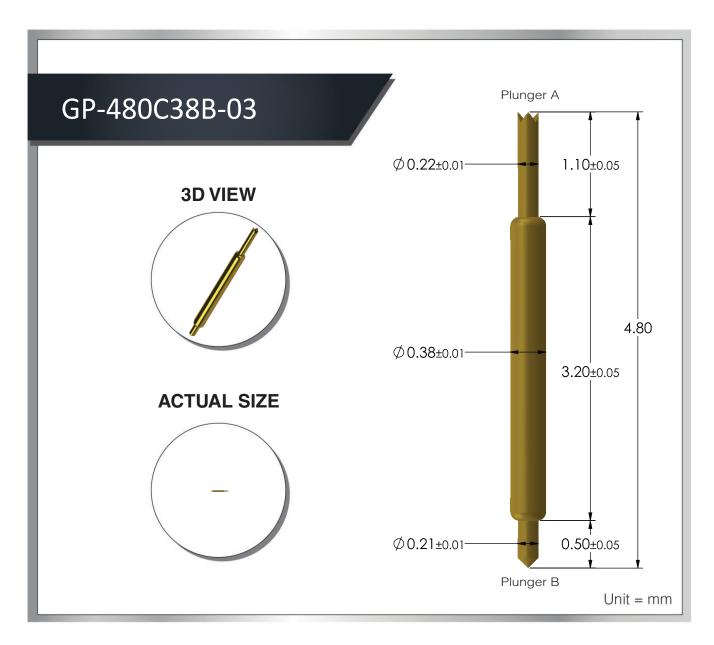
Group Material Finishing
Plunger A Beryllium Copper Gold Plated
Plunger B Beryllium Copper Gold Plated
Barrel Phosphor Bronze Gold Plated
Spring Music Wire Gold Plated



PRODUCT SPECIFICATION

Pitch 0.50mm **Rated Stroke** 0.60mm **Full Stroke** 0.80mm **Spring Force** 35.50gf (±20%) at 2/3 Travel Contact Resistance < 100mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated

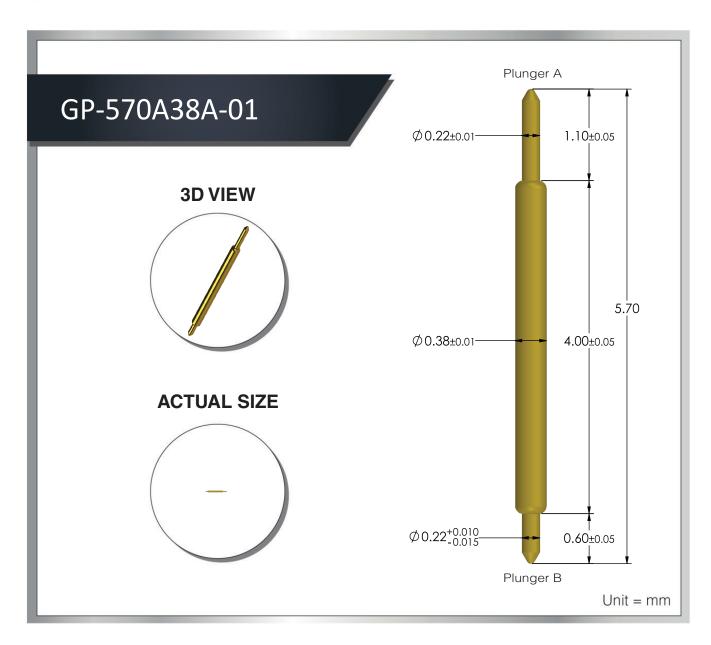


PRODUCT SPECIFICATION

 $\begin{array}{lll} \mbox{Pitch} & 0.50\mbox{mm} \\ \mbox{Rated Stroke} & 0.50\mbox{mm} \\ \mbox{Full Stroke} & 0.60\mbox{mm} \\ \mbox{Spring Force} & 30\mbox{gf ($\pm 20\%$)} \\ \mbox{at $2/3$ Travel} \\ \mbox{Contact Resistance} & < 50\mbox{m}\Omega \\ \mbox{Current Rating} & 3\mbox{A, Continuous} \\ \mbox{Lifespan} & > 500,000 \mbox{ insertion} \end{array}$

(Mechanical)

Material	Finishing
Beryllium Copper	Gold Plated
Beryllium Copper	Gold Plated
Phosphor Bronze	Gold Plated
Music Wire	Gold Plated
	Beryllium Copper Beryllium Copper Phosphor Bronze

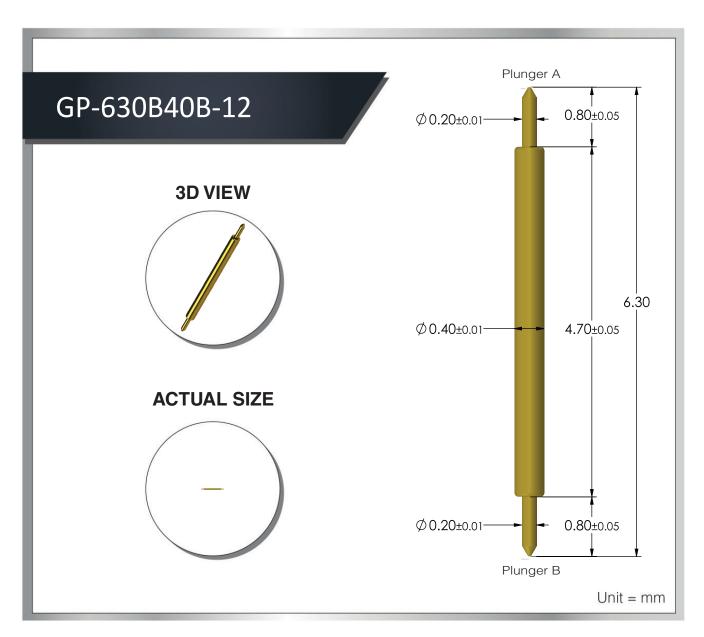


PRODUCT SPECIFICATION

Pitch 0.50mm **Rated Stroke** 0.65mm **Full Stroke** 0.80mm **Spring Force** 25gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

COMPONENT DISTRIBUTION

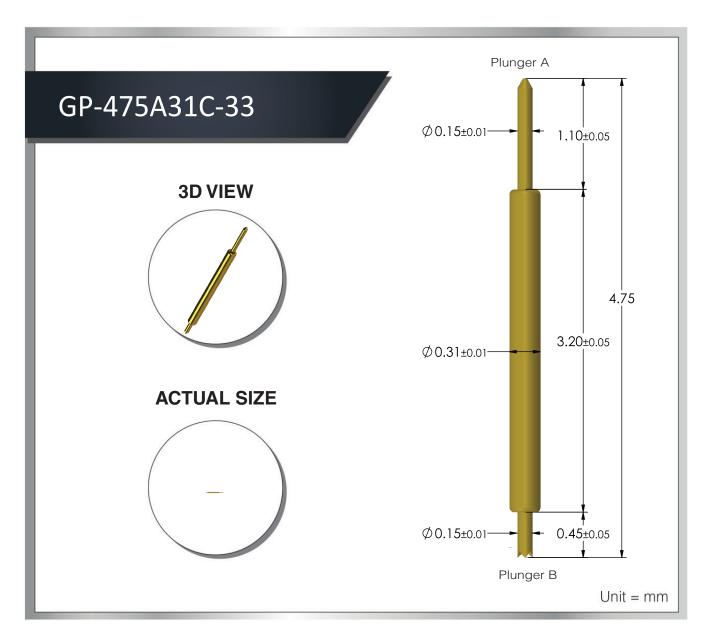
Group Material **Finishing** Plunger A Beryllium Copper **Gold Plated** Plunger B Beryllium Copper **Gold Plated** Barrel Phosphor Bronze **Gold Plated** Music Wire Spring **Gold Plated**



PRODUCT SPECIFICATION

Pitch 0.50mm Rated Stroke 0.80mm Full Stroke 1.20mm **Spring Force** 13gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

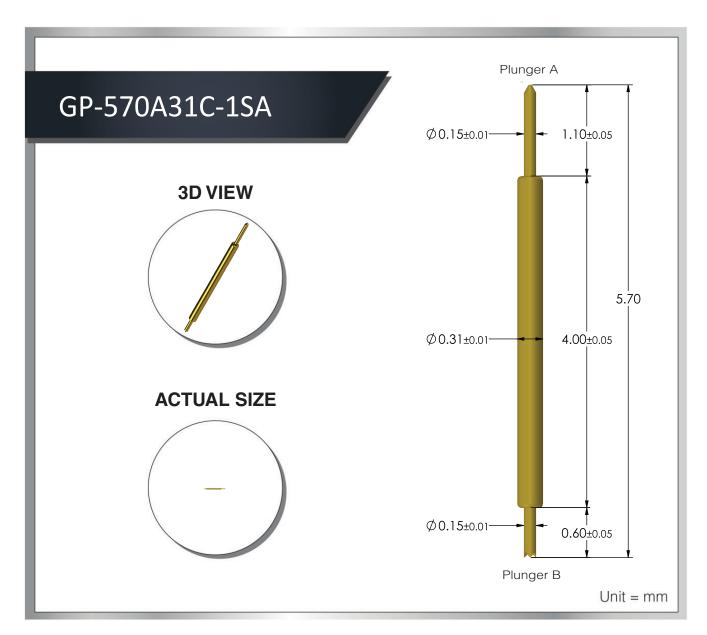
Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Stainless Steel	Gold Plated



PRODUCT SPECIFICATION

Pitch 0.40mm **Rated Stroke** 0.60mm **Full Stroke** 0.90mm **Spring Force** 25gf (±20%) at 2/3 Travel Contact Resistance < 100mΩ **Current Rating** 2A, Continuous > 500,000 insertion Lifespan (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Hardened Steel	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated



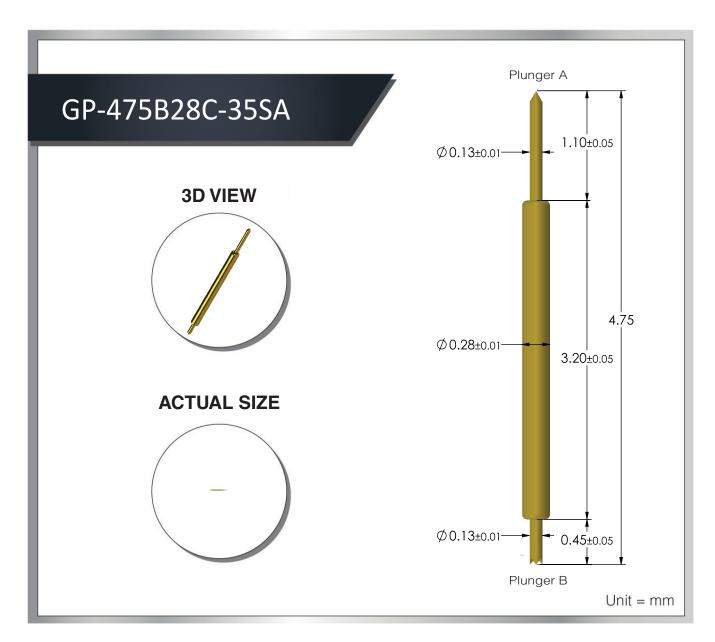
PRODUCT SPECIFICATION

Pitch 0.40mm **Rated Stroke** 0.65mm **Full Stroke** 1.10mm **Spring Force** 25gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 2A, Continuous > 500,000 insertion Lifespan (Mechanical)

COMPONENT DISTRIBUTION

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Hardened Steel	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated

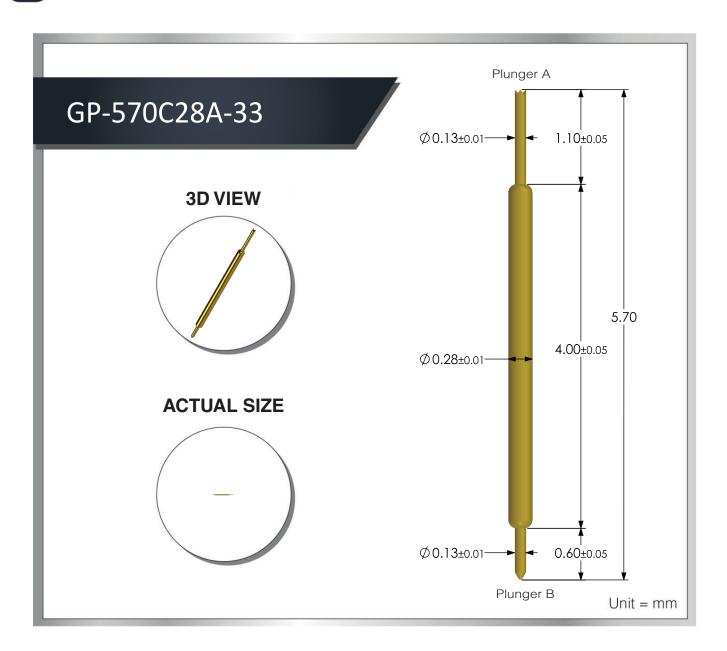
20



PRODUCT SPECIFICATION

Pitch 0.35mm **Rated Stroke** 0.65mm Full Stroke 1.10mm **Spring Force** 25gf (±20%) at 2/3 Travel Contact Resistance $< 100 m\Omega$ **Current Rating** 2A, Continuous Lifespan > 500,000 insertion (Mechanical)

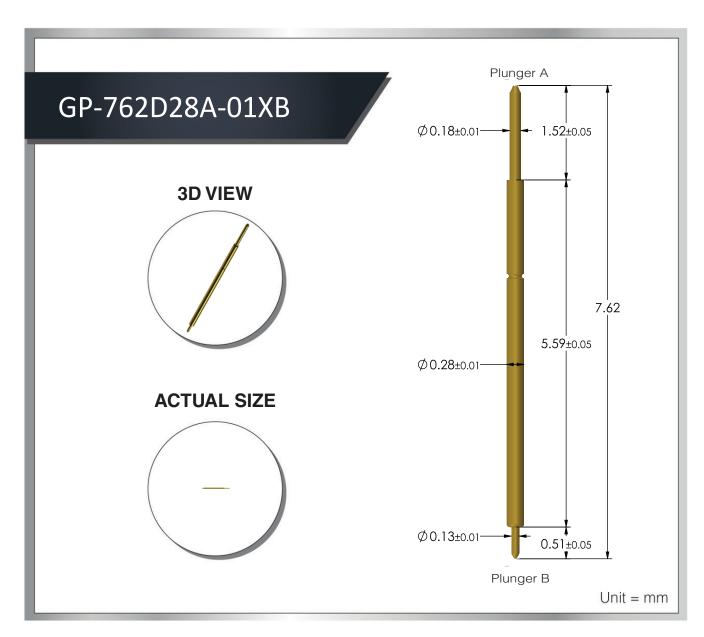
Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated



PRODUCT SPECIFICATION

Pitch 0.35mm **Rated Stroke** 0.65mm **Full Stroke** 1.10mm **Spring Force** 25gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 2A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Hardened Steel	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated

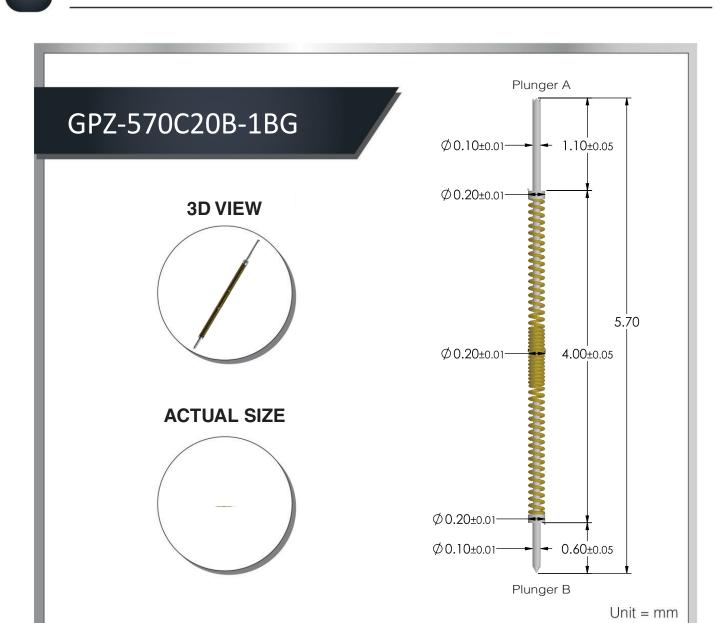


PRODUCT SPECIFICATION

 $\begin{array}{lll} \mbox{Pitch} & 0.35\mbox{mm} \\ \mbox{Rated Stroke} & 1.00\mbox{mm} \\ \mbox{Full Stroke} & 1.40\mbox{mm} \\ \mbox{Spring Force} & 4gf (\pm 20\%) \\ \mbox{at 2/3 Travel} \\ \mbox{Contact Resistance} & < 50\mbox{m}\Omega \\ \mbox{Current Rating} & 2\mbox{A, Continuous} \\ \mbox{Lifespan} & > 500,000 \mbox{ insertion} \end{array}$

(Mechanical)

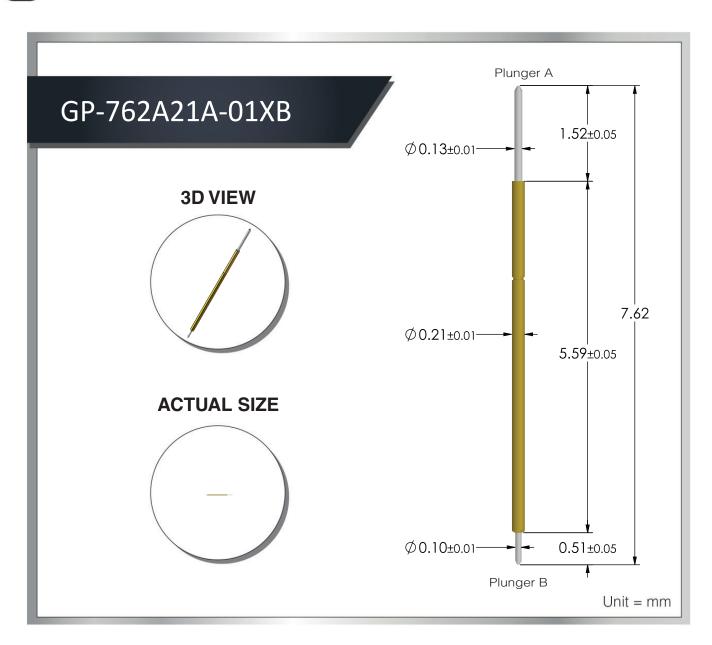
Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated



PRODUCT SPECIFICATION

Pitch 0.30mm **Rated Stroke** 0.65mm **Full Stroke** 1.00mm 10.80gf (±20%) **Spring Force** at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 1A, Continuous > 300,000 insertion Lifespan (Mechanical)

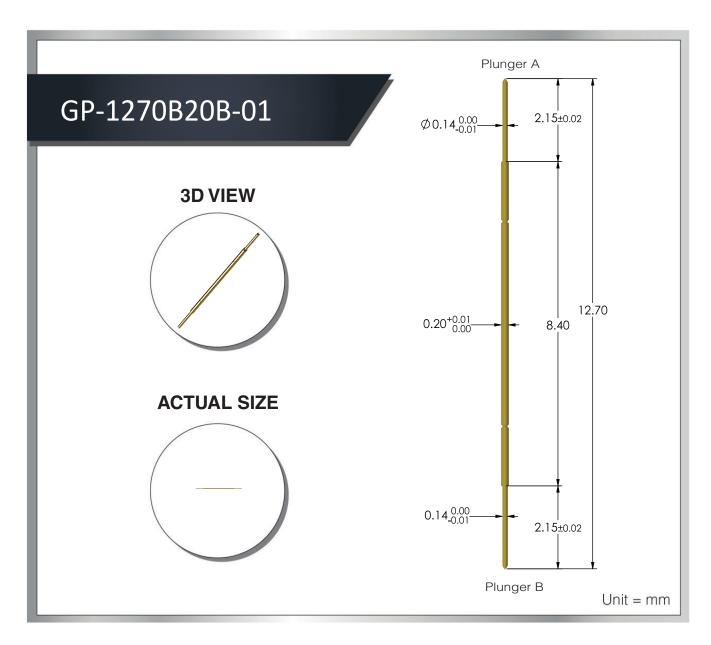
Group	Material	Finishing
Plunger A	Black Gold Alloy	No Plating
Plunger B	Black Gold Alloy	No Plating
Barrel	-	-
Spring	Black Gold Alloy	Gold Plated



PRODUCT SPECIFICATION

Pitch 0.30mm Rated Stroke 0.65mm **Full Stroke** 0.80mm **Spring Force** 10.50gf (±20%) at 2/3 Travel **Contact Resistance** < 100mΩ **Current Rating** 1A, Continuous Lifespan > 300,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Black Gold Alloy	No Plating
Plunger B	Black Gold Alloy	No Plating
Barrel	High Performance PBT	Gold Plated
Spring	Black Gold Alloy	Gold Plated

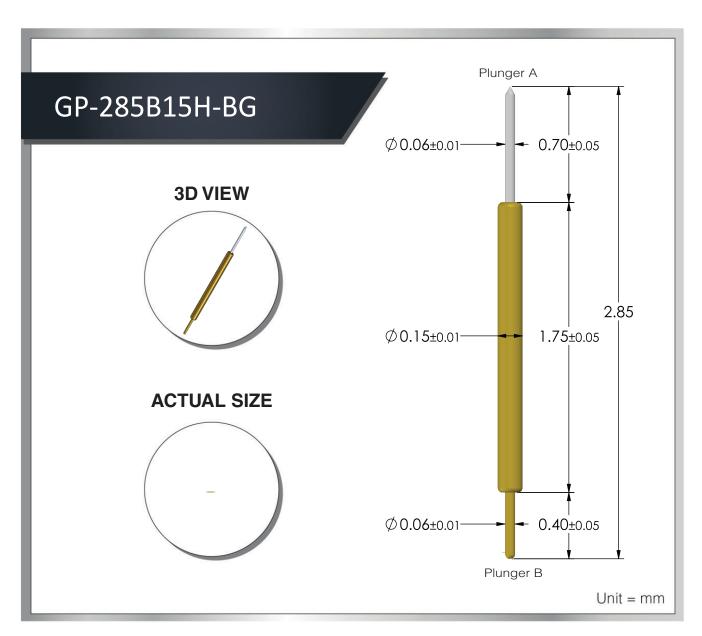


PRODUCT SPECIFICATION

Pitch 0.30mm Rated Stroke 1.20mm Full Stroke 1.60mm **Spring Force** 10gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 1A, Continuous Lifespan > 300,000 insertion (Mechanical)

COMPONENT DISTRIBUTION

GroupMaterialFinishingPlunger ABeryllium CopperGold PlatedPlunger BBeryllium CopperGold PlatedBarrelPhosphor BronzeGold PlatedSpringMusic WireGold Plated

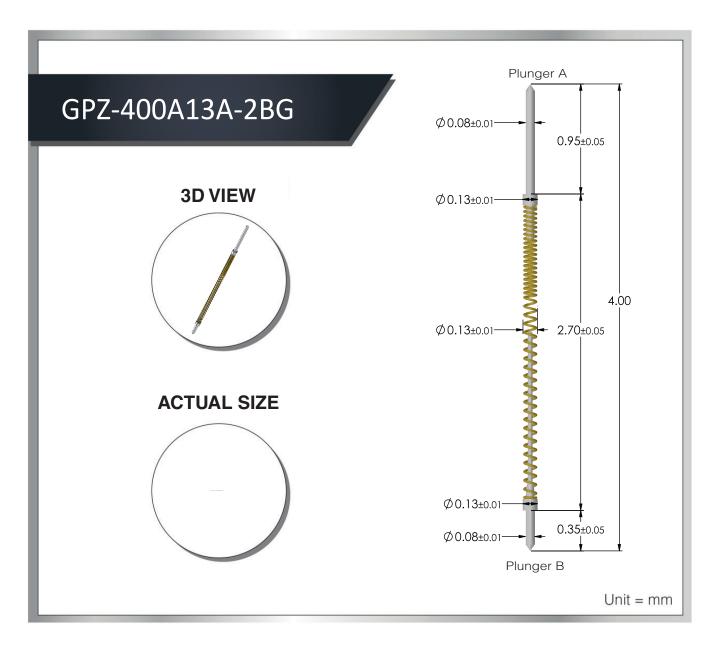


PRODUCT SPECIFICATION

Pitch 0.20mm Rated Stroke 0.30mm **Full Stroke** 0.35mm **Spring Force** 4.5gf (±20%) at 2/3 Travel **Contact Resistance** $< 50 \text{m}\Omega$ **Current Rating** 1A, Continuous Lifespan > 300,000 insertion (Mechanical)

COMPONENT DISTRIBUTION

GroupMaterialFinishingPlunger ABlack Gold AlloyNo PlatingPlunger BBeryllium CopperGold PlatedBarrelGold AlloyNo PlatingSpringMusic WireGold Plated



PRODUCT SPECIFICATION

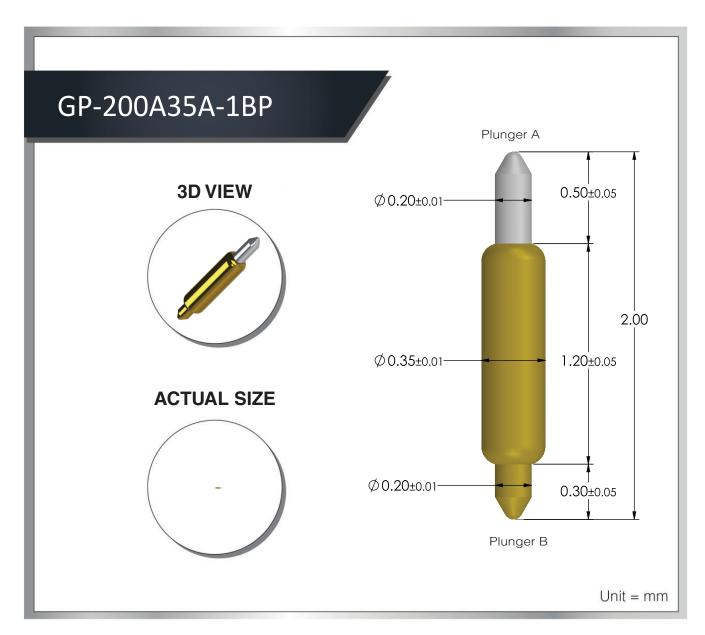
Pitch 0.20mm Rated Stroke 0.45mm **Full Stroke** 0.70mm **Spring Force** 10.80gf (±20%) at 2/3 Travel Contact Resistance < 100mΩ **Current Rating** 1A, Continuous > 300,000 insertion Lifespan (Mechanical)

Group	Material	Finishing
Plunger A	Black Gold Alloy	No Plating
Plunger B	Black Gold Alloy	No Plating
Barrel	-	-
Spring	Music Wire	Gold Plated



Short Pin Series	
GP-200A35A-1BP	30
GP-287D38H-04	31
High Performance Series	S
GP-570C38A-8BG	32
GP-570K38A-9DB	33
SLATINO (GPS) Series	
GPS-287C38A-02	34
GPS-455D38A-42BA	35
XITANO (GPX) Series	
GPX-150D65A-10BA	36
GPX-300D65H-96BA	37
GPX-585D65A-6BG	38

Short Pin Series

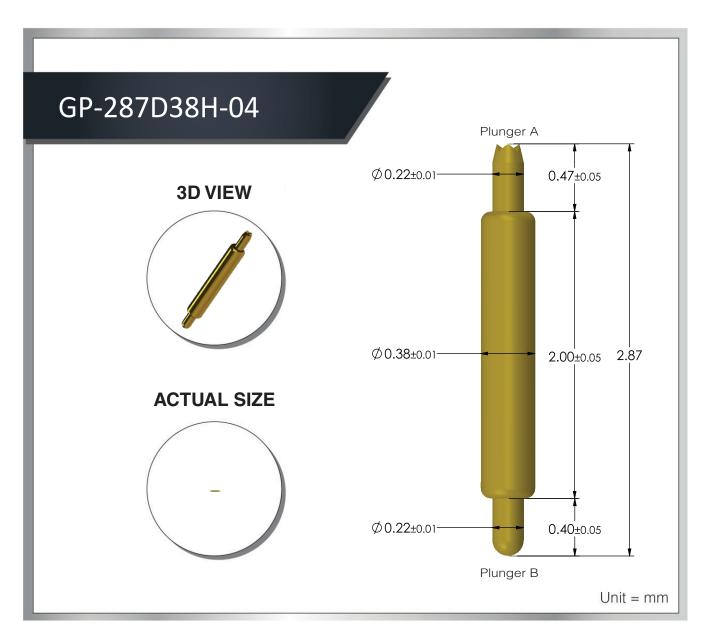


PRODUCT SPECIFICATION

Pitch 0.50mm **Rated Stroke** 0.30mm **Full Stroke** 0.40mm **Spring Force** 18gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Beryllium Copper	Black Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated

Short Pin Series



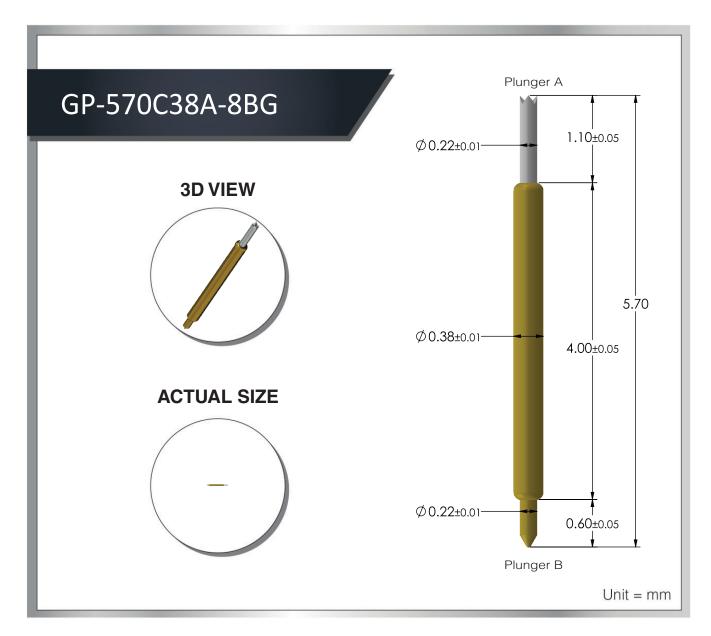
PRODUCT SPECIFICATION

Pitch 0.50mm Rated Stroke 0.40mm **Full Stroke** 0.60mm **Spring Force** 35gf (±20%) at 2/3 Travel **Contact Resistance** $< 50 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Stainless Steel	Gold Plated



High Performance Series



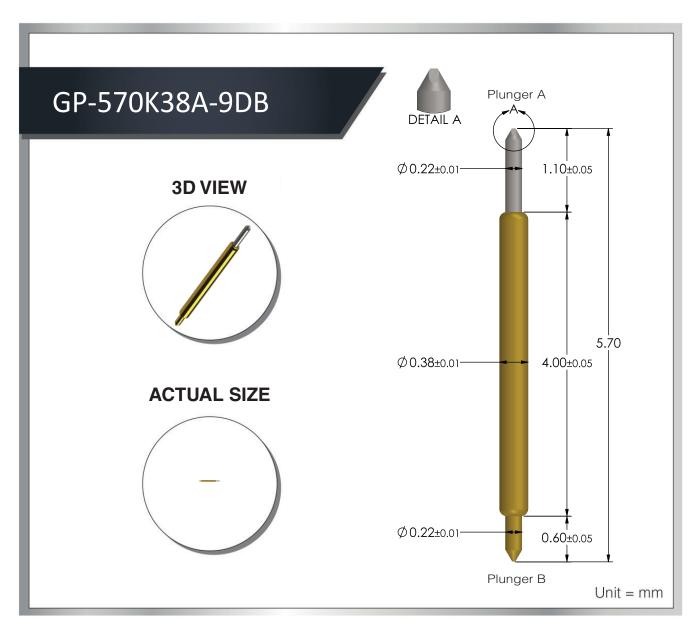
PRODUCT SPECIFICATION

Pitch 0.50mm Rated Stroke 0.65mm **Full Stroke** 0.80mm **Spring Force** 30gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Black Gold Alloy	No Plating
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Stainless Steel	Gold Plated



High Performance Series



PRODUCT SPECIFICATION

Pitch 0.50mm

Rated Stroke 0.65mm

Full Stroke 0.80mm

Spring Force $30gf (\pm 20\%)$ at 2/3 Travel

Contact Resistance $< 50m\Omega$ Current Rating 3A, Continuous

Lifespan > 500,000 insertion

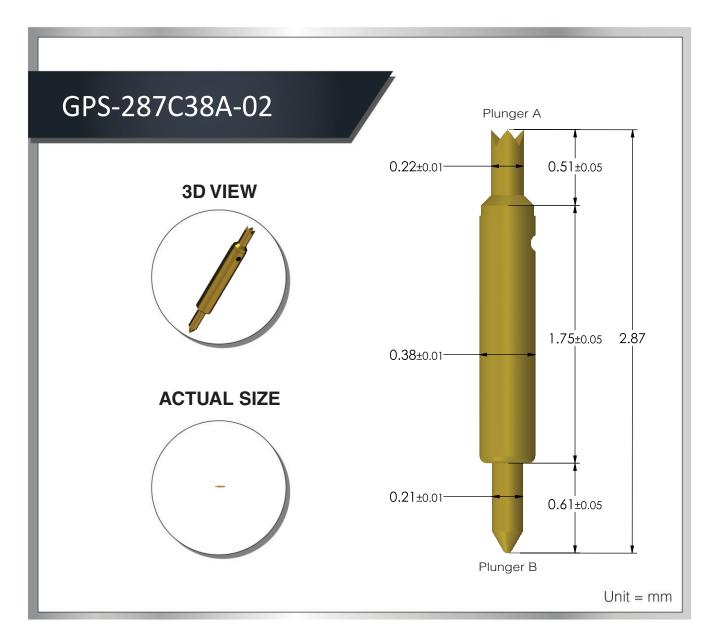
(Mechanical)

COMPONENT DISTRIBUTION

GroupMaterialFinPlunger ABeryllium CopperBlack GPlunger BBeryllium CopperGoldBarrelPhosphor BronzeGoldSpringStainless SteelGold

Finishing
Black Gold Plated
Gold Plated
Gold Plated
Gold Plated
Gold Plated

SLATINO (GPS) Series



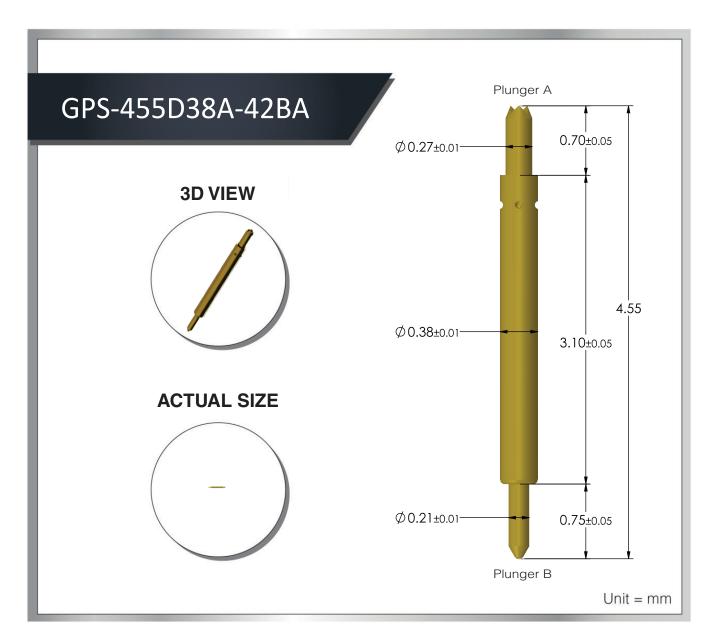
PRODUCT SPECIFICATION

 $\begin{array}{lll} \mbox{Pitch} & 0.50\mbox{mm} \\ \mbox{Rated Stroke} & 0.40\mbox{mm} \\ \mbox{Full Stroke} & 0.50\mbox{mm} \\ \mbox{Spring Force} & 20\mbox{gf ($\pm 20\%$)} \\ \mbox{at $2/3$ Travel} \\ \mbox{Contact Resistance} & < 50\mbox{m}\Omega \\ \mbox{Current Rating} & 3\mbox{A, Continuous} \\ \mbox{Lifespan} & > 500,000 \mbox{ insertion} \end{array}$

(Mechanical)

Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Integrated Single Body	With Plunger A
Spring	Stainless Steel	Gold Plated

SLATINO (GPS) Series

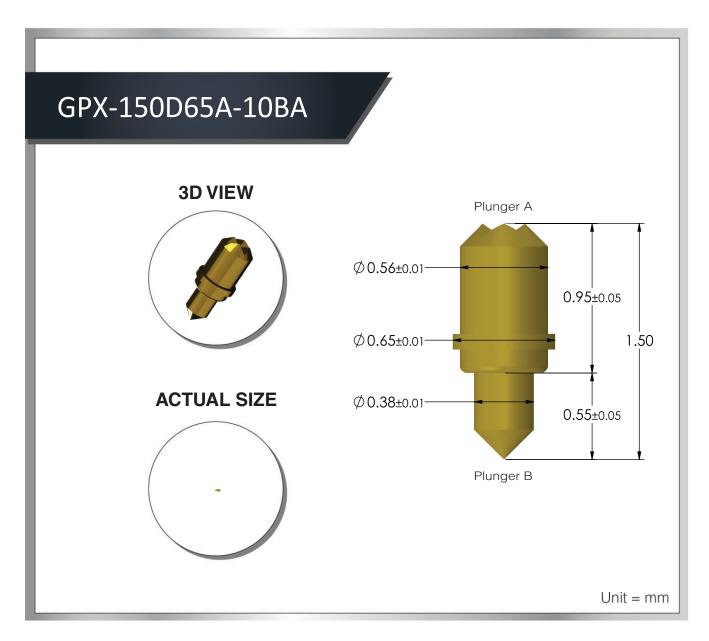


PRODUCT SPECIFICATION

Pitch 0.50mm Rated Stroke 0.30mm Full Stroke 0.45mm Spring Force 30gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Stainless Steel	Gold Plated

XITANO (GPX) Series



PRODUCT SPECIFICATION

 $\begin{array}{lll} \mbox{Pitch} & 0.80\mbox{mm} \\ \mbox{Rated Stroke} & 0.40\mbox{mm} \\ \mbox{Full Stroke} & 0.50\mbox{mm} \\ \mbox{Spring Force} & 30\mbox{gf ($\pm 20\%$)} \\ \mbox{at $2/3$ Travel} \\ \mbox{Contact Resistance} & < 50\mbox{m}\Omega \\ \end{array}$

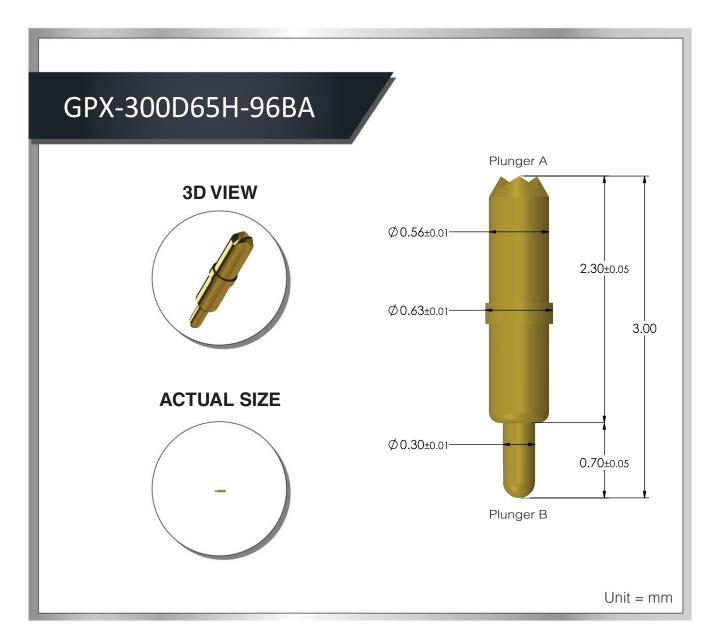
Current Rating
Lifespan

30gf (±20%)
at 2/3 Travel
< 50mΩ
3A, Continuous
> 500,000 insertion
(Mechanical)

COMPONENT DISTRIBUTION

GroupMaterialFinishingPlunger ABeryllium CopperGold PlatedPlunger BBeryllium CopperGold PlatedBarrelIntegrated Single Body With Plunger ASpringStainless SteelGold Plated

XITANO (GPX) Series

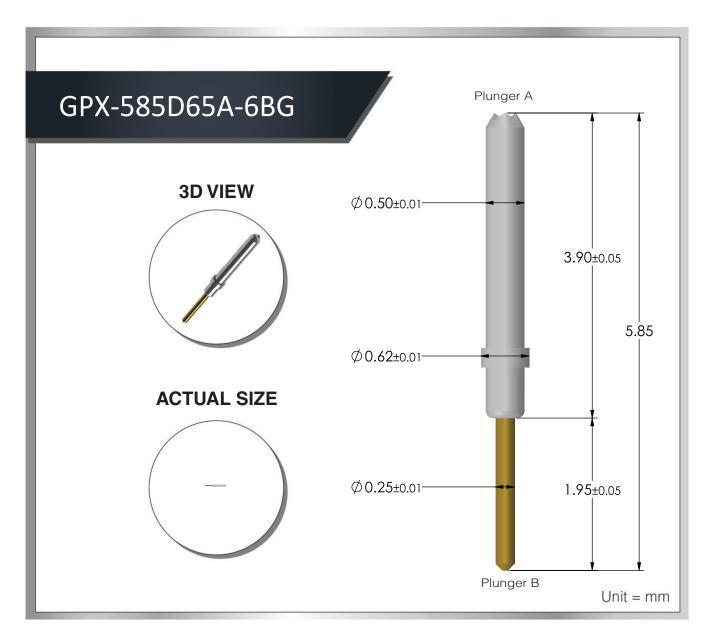


PRODUCT SPECIFICATION

Pitch 0.80mm **Rated Stroke** 0.50mm **Full Stroke** 0.70mm **Spring Force** 25gf (±20%) at 2/3 Travel **Contact Resistance** $< 50 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Beryllium Copper	Gold Plated
Plunger B	Beryllium Copper	Gold Plated
Barrel	Integrated Single Body	With Plunger A
Spring	Stainless Steel	Gold Plated

XITANO (GPX) Series

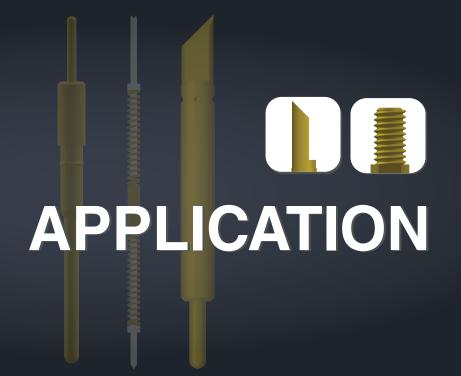


PRODUCT SPECIFICATION

Pitch 0.80mm **Rated Stroke** 0.75mm **Full Stroke** 0.90mm Spring Force 40gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

COMPONENT DISTRIBUTION

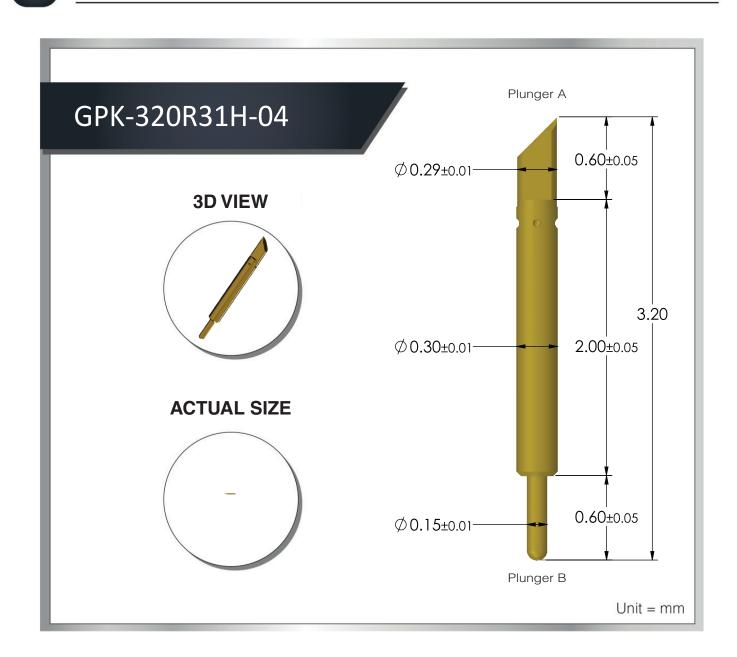
Finishing Group Material Plunger A No Plating Black Gold Alloy Plunger B **Gold Plated** Beryllium Copper Barrel Integrated Single Body With Plunger A Music Wire Spring **Gold Plated**



1101111111110	
GPK-320R31H-04	 40
GPK-390M30A-1BA	 41
Non-Magnetic Pins	
GPX-255D65H-M1BE -	 42
GPX-585D65A-M1BG	 43
GPI-1270H-M1BA	 44
GPZ Pins	
GPZ-400A13A-2BG	15
GPZ-570C20B-1BG	
GPZ-1270B20B-02	 47
Receptable Pins	
HRP-1400-11	 48
HRP-2230H1177-03	 49
HRP-2500-01	
Solid Pins	
GF-450-01	
GF-1910R151051R-03	 52
CE 5030 H17	52

Kelvin Pins

Kelvin Pins

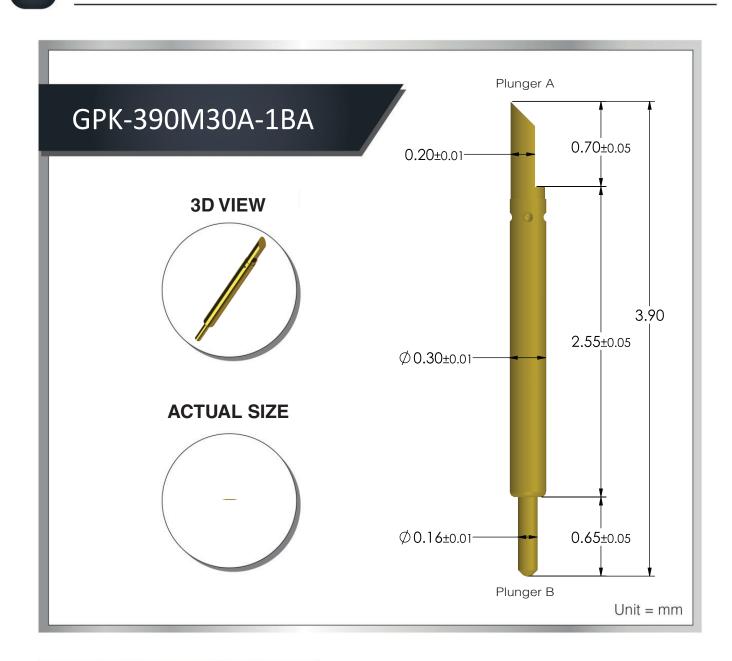


PRODUCT SPECIFICATION

Pitch 0.40mm Rated Stroke 0.40mm **Full Stroke** 0.55mm 25gf (±20%) **Spring Force** at 2/3 Travel **Contact Resistance** < 50mΩ 2A, Continuous **Current Rating** Lifespan > 200,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Hardened Steel	Gold Plated
Barrel	Phosphor Bronze	Gold Plated
Spring	Music Wire	Gold Plated

Kelvin Pins

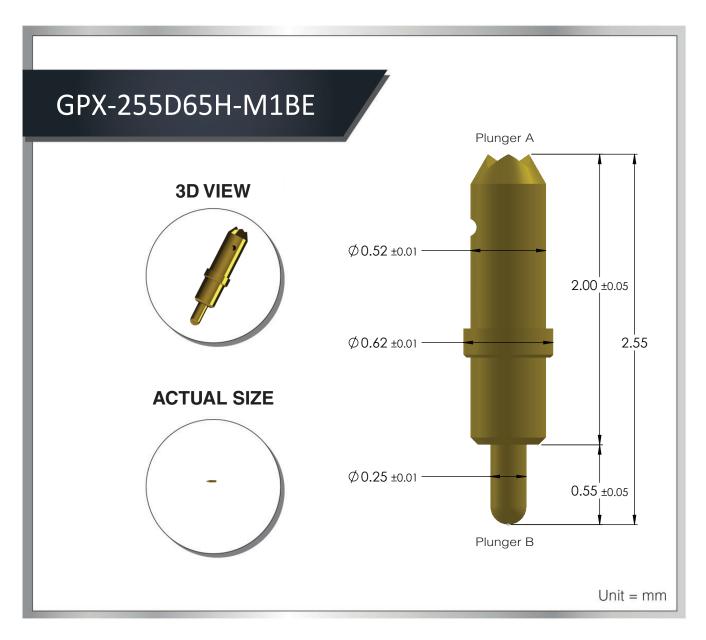


PRODUCT SPECIFICATION

Pitch 0.40mm Rated Stroke 0.45mm Full Stroke 0.65mm Spring Force 22gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Material	Finishing
Beryllium Copper	Gold Plated
Beryllium Copper	Gold Plated
Phosphor Bronze	Gold Plated
Music Wire	Gold Plated
	Beryllium Copper Beryllium Copper Phosphor Bronze

Non-Magnetic Series



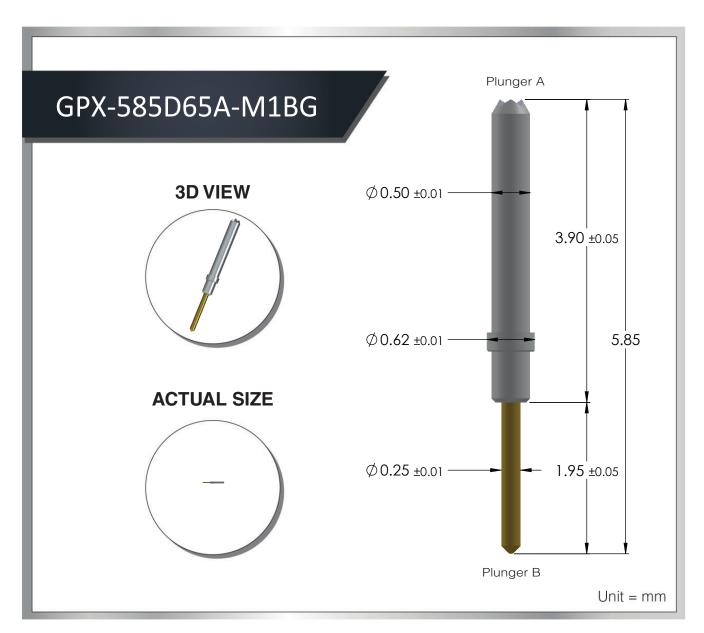
PRODUCT SPECIFICATION

Pitch 0.80mm Rated Stroke 0.40mm Full Stroke 0.55mm **Spring Force** 40gf (±20%) at 2/3 Travel **Contact Resistance** < 50mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion

(Mechanical)

Material	Finishing
Non Magnetic BG	Gold Plated
Non Magnetic BG	Gold Plated
Integrated Single Bod	y With Plunger A
HyperAlloy	Gold Plated
	Non Magnetic BG Integrated Single Bod

Non-Magnetic Series



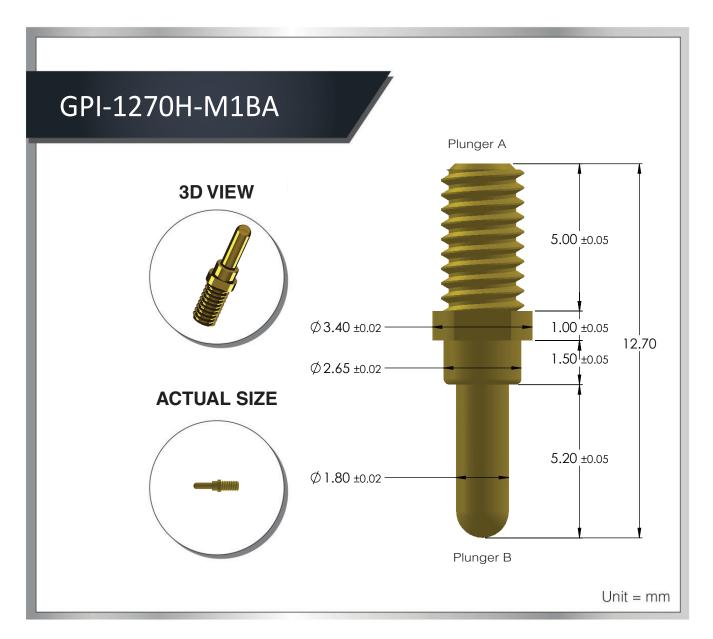
PRODUCT SPECIFICATION

Pitch 0.80mm 0.75mm
Full Stroke 0.90mm
Spring Force $10gf (\pm 20\%)$ at 2/3 Travel
Contact Resistance $< 50m\Omega$
Current Rating 3A, Continuous Lifespan > 500,000 insertion

(Mechanical)

Group	Material	Finishing
Plunger A	Non Magnetic BG	No Plating
Plunger B	Non Magnetic BG	Gold Plated
Barrel	Integrated Single Body	With Plunger A
Spring	HyperAlloy	Gold Plated

Non-Magnetic Series



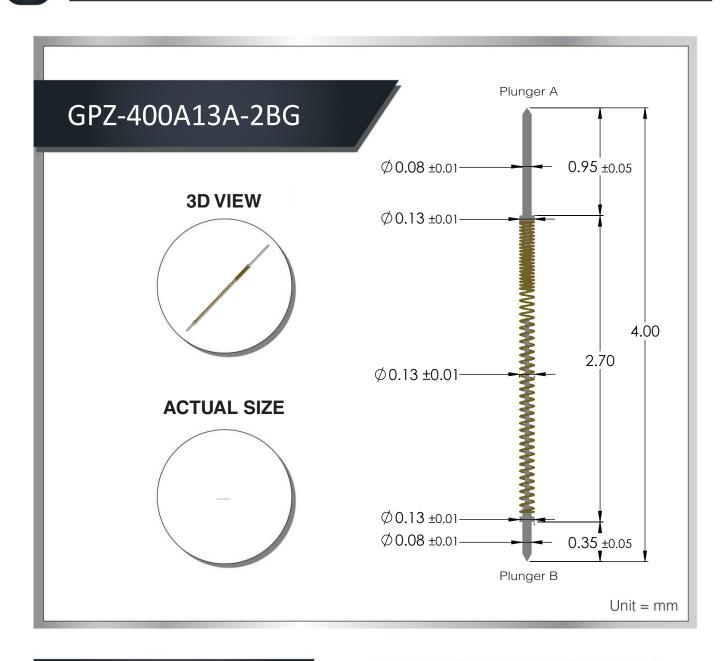
PRODUCT SPECIFICATION

Pitch 5.00mm **Rated Stroke** 1.00mm **Full Stroke** 4.00mm **Spring Force** 12gf (±20%) at 2/3 Travel **Contact Resistance** < 100mΩ **Current Rating** 3A, Continuous Lifespan > 500,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Non Magnetic BG	Gold Plated
Plunger B	Non Magnetic BG	Gold Plated
Barrel	-	-
Spring	HyperAlloy	Gold Plated





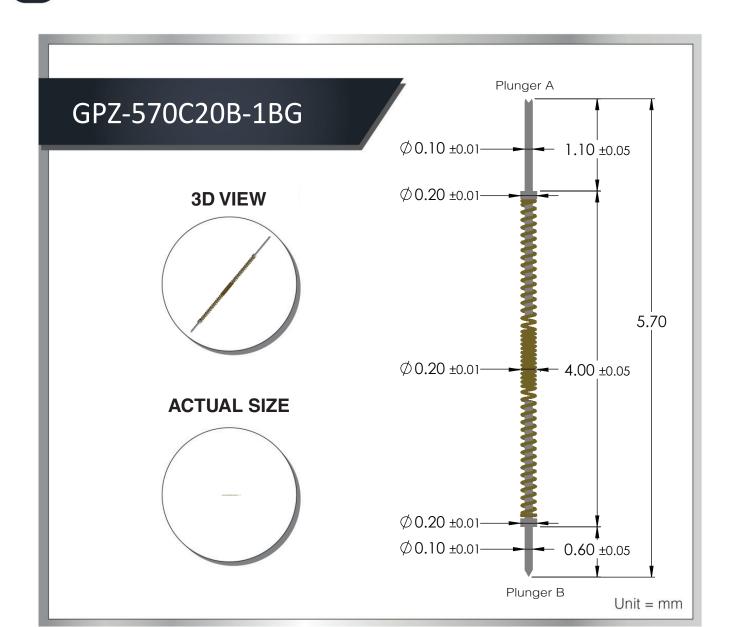


PRODUCT SPECIFICATION

Pitch 0.20mm **Rated Stroke** 0.45mm **Full Stroke** 0.70mm **Spring Force** 10.80gf (±20%) at 2/3 Travel **Contact Resistance** $< 100 m\Omega$ **Current Rating** 1A, Continuous Lifespan > 300,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Black Gold Alloy	No Plating
Plunger B	Black Gold Alloy	No Plating
Barrel	-	-
Spring	Music Wire	Gold Plated



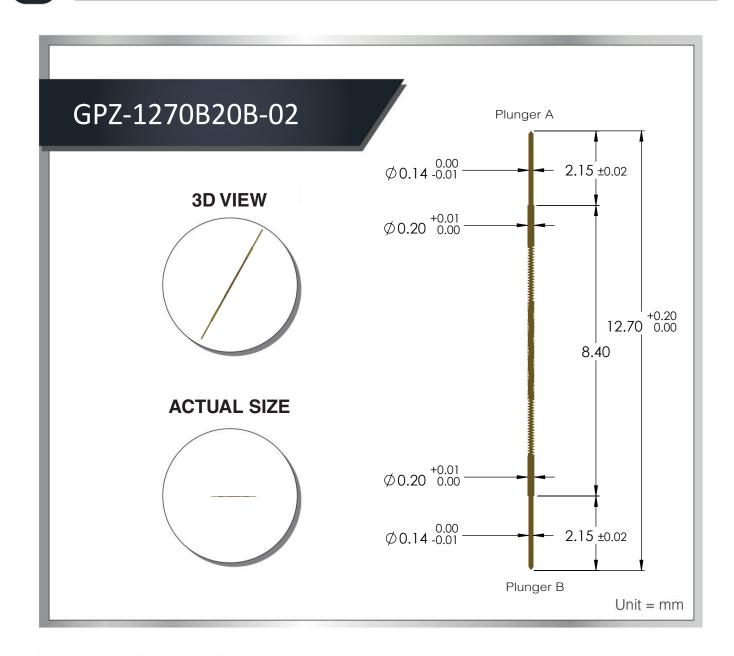


PRODUCT SPECIFICATION

Pitch 0.30mm Rated Stroke 0.65mm Full Stroke 1.00mm Spring Force 10.80gf (±20%) at 2/3 Travel **Contact Resistance** < 100mΩ **Current Rating** 1A, Continuous Lifespan > 300,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Black Gold Alloy	No Plating
Plunger B	Black Gold Alloy	No Plating
Barrel	-	-
Spring	Black Gold Alloy	Gold Plated

GPZ Series

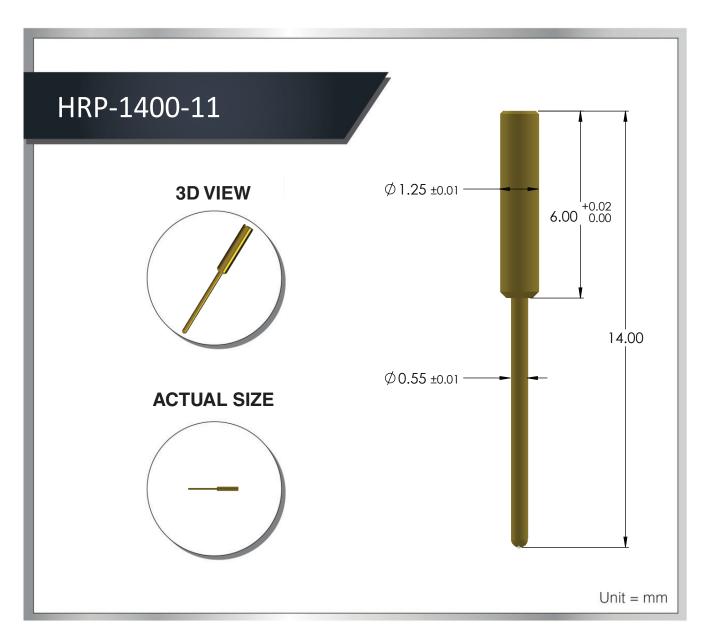


PRODUCT SPECIFICATION

Pitch 0.30mm Rated Stroke 1.20mm Full Stroke 1.60mm **Spring Force** 10gf (±20%) at 2/3 Travel **Contact Resistance** < 100mΩ **Current Rating** 1A, Continuous Lifespan > 300,000 insertion (Mechanical)

Group	Material	Finishing
Plunger A	Hardened Steel	Gold Plated
Plunger B	Hardened Steel	Gold Plated
Barrel	-	-
Spring	Music Wire	Gold Plated

Receptacle Pins



PRODUCT SPECIFICATION

Insertion Depth 5.20mm

Insertion Force 65gf (based on male

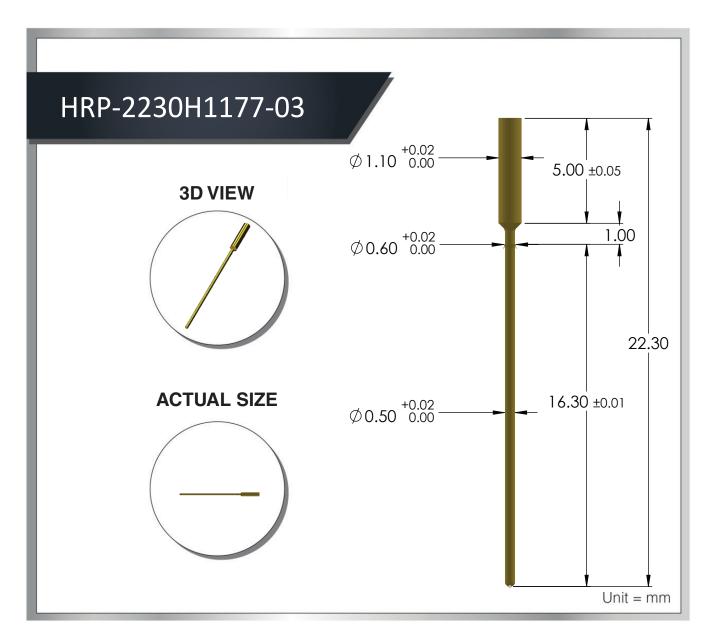
pin OD 0.50mm)

Withrawal Force 22gf

COMPONENT DISTRIBUTION

Group Material Finishing
Body Beryllium Copper Gold Plated
Spring Leaf Beryllium Copper Gold Plated

Receptacle Pins



PRODUCT SPECIFICATION

Insertion Depth 4.80mm

Insertion Force 60gf (based on male

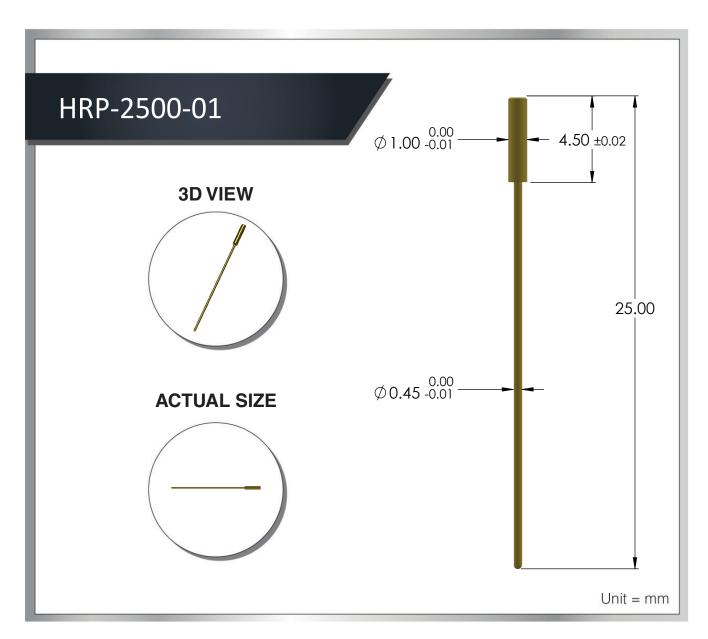
pin OD 0.35mm)

Withrawal Force 15gf

COMPONENT DISTRIBUTION

Group Material Finishing
Body Beryllium Copper Gold Plated
Spring Leaf Beryllium Copper Gold Plated

Receptacle Pins



PRODUCT SPECIFICATION

Insertion Depth 4.20mm

Insertion Force 65gf (based on male

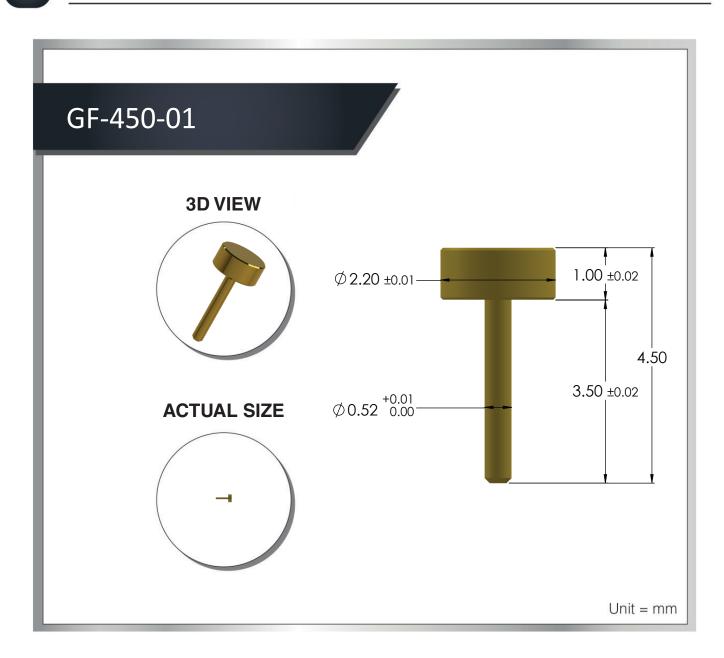
pin OD 0.50mm)

Withrawal Force 22gf

COMPONENT DISTRIBUTION

Group Material Finishing
Body Beryllium Copper Gold Plated
Spring Leaf Beryllium Copper Gold Plated

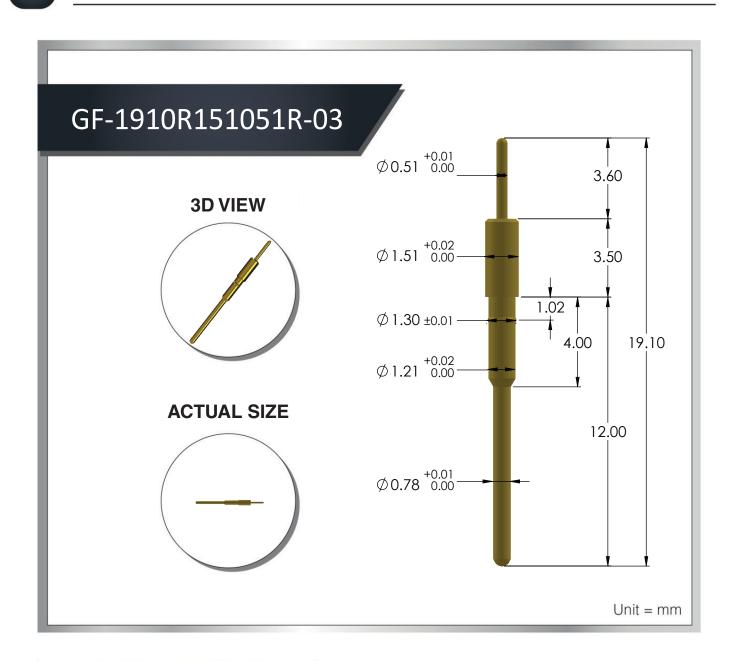
Solid Pins



COMPONENT DISTRIBUTION

Group Material FinishingBody Beryllium Copper Gold over Nickel

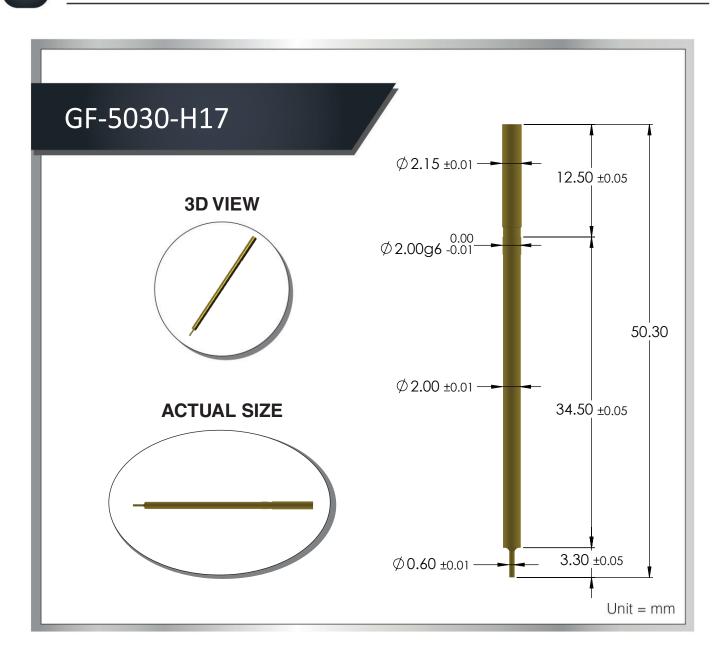
Solid Pins



COMPONENT DISTRIBUTION

Group Material Finishing
Body Beryllium Copper Gold over Nickel

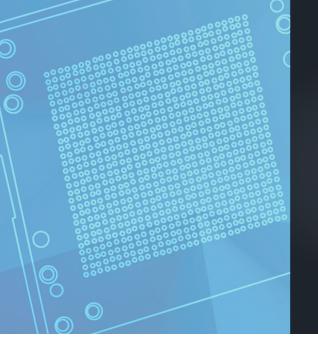
Solid Pins



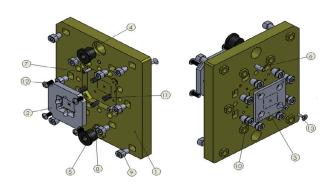
COMPONENT DISTRIBUTION

Group Material Finishing
Body Brass No Plating

53



SEMICONDUCTOR TEST SOCKET



Test Socket Pitch

0.20mm ~ 1.27mm

Test Application

BGA, LGA, QFN, QFP, MLF, SOP, TSSOP, PLCC, CCM

Test Socket Material

Vespel, Torlon, Semitron, Ultem, Peek, etc

Standard Test Socket

Design and manufacture in accordance with existing load board footprint and test handler configuration

Customization

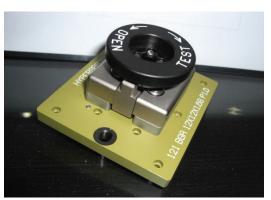
Design and manufacture in accordance with customer's special requirement



SEMICONDUCTOR TEST SOCKET

Test Socket - Manual









▶ Test Socket - Automation







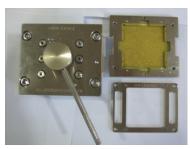




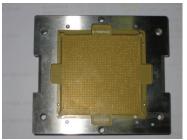


SEMICONDUCTOR TEST SOCKET

▶ Test Socket - BGA







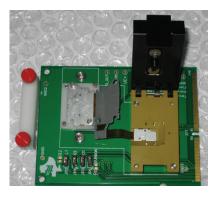




▶ Test Socket - FPC



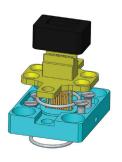




▶ Test Socket - CCM



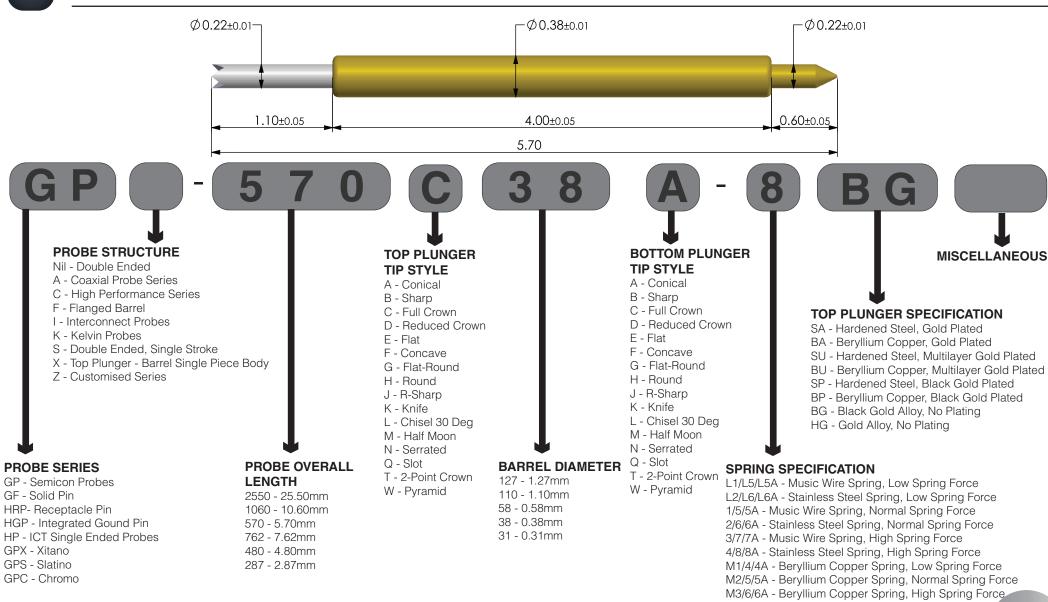




APPENDIX

Part Number Coding	 58
Tip Style Selection	 59

HYPERSPACE PART NUMBER CODING





TIP STYLE SELECTION

Letter Coding	Tip Style	Visualization
А	Conical	
В	Sharp	
С	Full Crown	
D	Reduced Crown	
Е	Flat	
F	Concave	
G	Flat-Round	
Н	Round	
J	R-Sharp	
K	Knife	
L	Chisel 30°	
M	Half Moon	
N	Serrated	
Q	Slot	
Т	2-Point Crown	K
W	Pyramid	

GALLERY



Hyperspace Building







www.hyperspace-intl.com

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