

Flexible Pitch GND Fixture Clamps GF-A

Advanced TLP/HMM/HBM Solutions

1 Features

- Compatible with GGB Picoprobe model 10 replacement probe tips
- <1 ns rise time
- Custom GND wire length 5 mm to 100 mm
- Gold-coated spring-steel clamp with micro-machined groove for locking of the clamps on the probe tip
- High conductivity and low inductance copper HF litz wire with 200 x Ø 0.02 mm strands
- Easy to use clamping
- Tungsten/carbide probe needle

2 Description

The GF-A is used for flexible pitch wafer- or package-level probing using GGB's picoprobe model 10 probetips.

If very short GND wire length of 5 mm is selected, also 200 ps rise time is possible. Extreme wire length, even up to 100 mm works at 10 ns rise time.

Fig. 2 shows the packing of a GF-A set. Fig. 1 to Fig. 3 show the typical application. Additional two micropositioners are required for the GND needles. For further information about the application of the GF-A please refer to the HPPI application note [AN-010](#).

Recommendation for tungsten needle replacement: [Quater](#), 0.508 mm (20 mil), part no.: H-20242 or optional from American Probe Technologies Inc., probe model # 72TC-D3/75 x 1", tungsten carbide probes with 1" length, 15° taper and 7.5 µm tip radius.

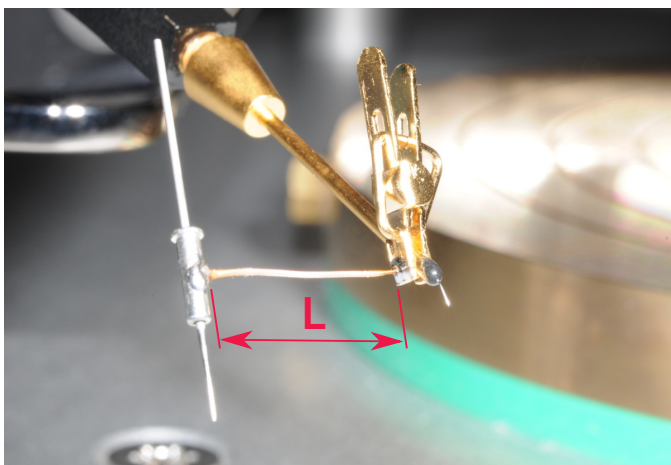


Figure 1: GF-A mounted on a picoprobe model 10 probetip. L is custom length available in the range from 5 mm to 100 mm.



Figure 2: GF-A packing (Example: L = 15 mm)

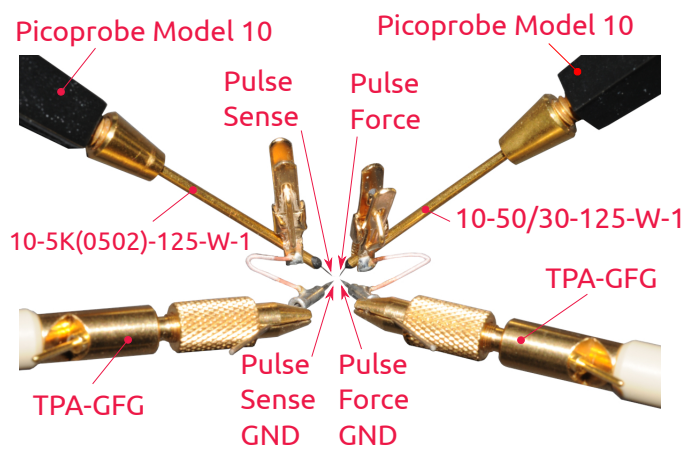


Figure 3: Flexible pitch configuration



Figure 4: Unique groove locking in the brackets of left- and right sided clamp for solid electrical contact, precise locking and easy use. Gold coating for high contact reliability. High conductivity and low inductance copper HF litz wire with 200 x Ø 0.02 mm strands.

Flexible Pitch GND Fixture Clamps GF-A

Advanced TLP/HMM/HBM Solutions

3 Assembly Instructions

Please take care that the clamps are mounted on the GGB Picoprobe Model 10 replacement probetips in the right direction. The GF-A kit consists of a left-sided and right-sided clamp, as shown in Fig. 5. On the left-sided clamp the litz wire is soldered on the bottom side of the clamp. On the right-sided clamp the litz wire is soldered on the top side of the clamp.

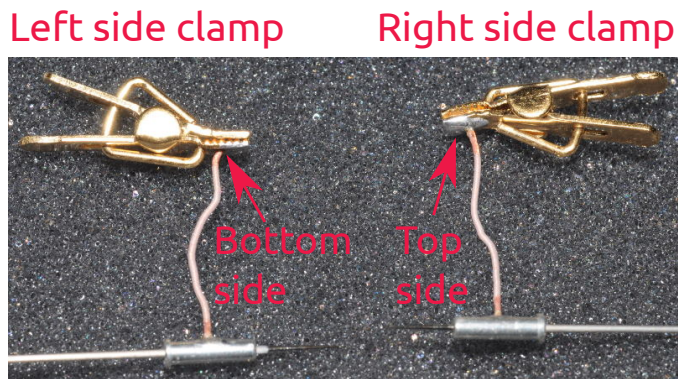


Figure 5: The GF-A set consists of a left-side and right-side clamp

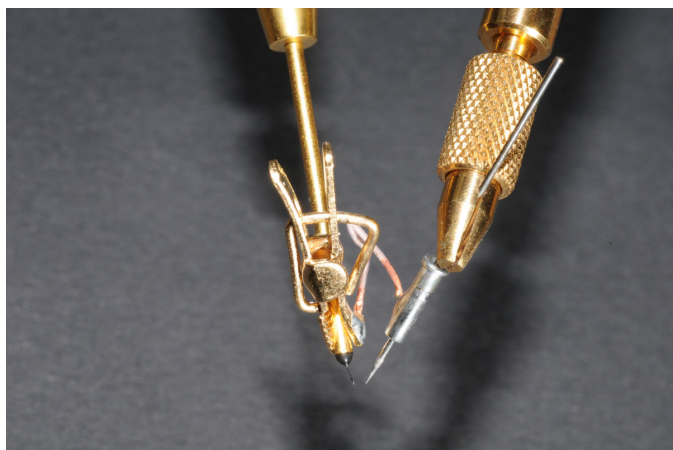


Figure 6: Example: mounted right-sided clamp

Note: It is important to distinguish between left-sided and right-sided clamp and probe tips in order to achieve tight locking of the clamps on the probe tip. The clamps can be easily locked and released with a tweezer or even by hand. High contact and clamping reliability is ensured by the micro-machined locking groove in the probe tip clamp brackets.

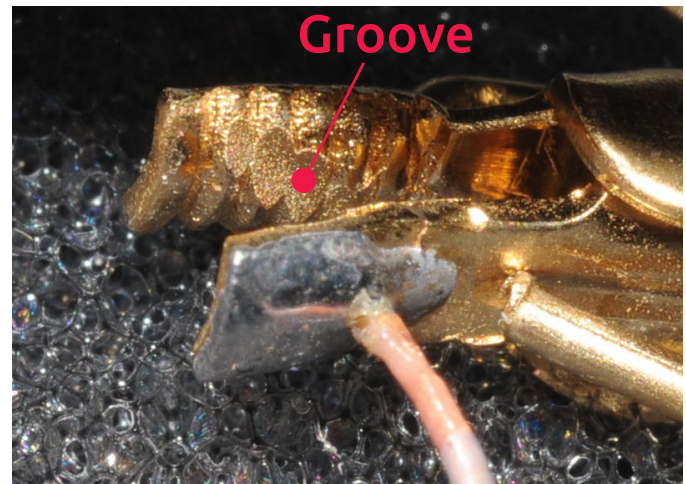


Figure 7: Right-sided clamp groove direction



Figure 8: Left-sided locked probe tip

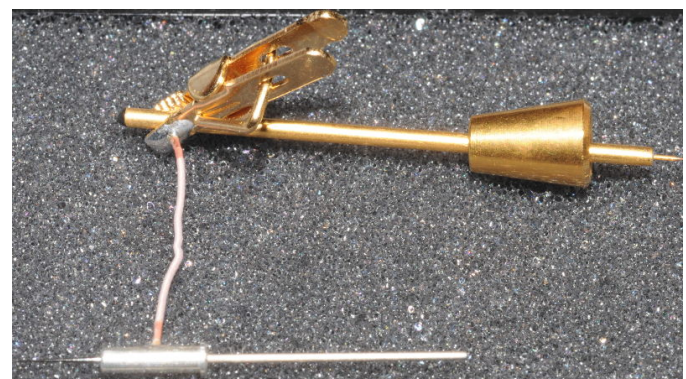


Figure 9: Right-sided locked probe tip

Flexible Pitch GND Fixture Clamps GF-A

Advanced TLP/HMM/HBM Solutions

4 Ordering Information

The ground fixture clamp GF-A can be ordered as follows:

Pos.	Description	Part No.
01	Flexible Pitch GND Fixture Clamps [xx] mm. Specify wire length [xx] in mm	GF-A / xx mm

Table 1: GF-A Ordering Information

Example: GF-A / 15 mm

One GF-A set (Fig. 2) consists of two parts:

Qty.	Description	Part No.
1	Left Clamp and Needle	GF-A-LC-N-xx
1	Right Clamp and Needle	GF-A-RC-N-xx

Table 2: GF-A parts (Fig. 2, Fig. 5 and Fig. 10)

4.1 Single Part Number Scheme

All parts can be ordered in different style separately. Specify wire length xx in [mm].

Description	Part No.	Picture
Left Clamp and Needle	GF-A-LC-N-xx	Fig. 11
Right Clamp and Needle	GF-A-RC-N-xx	Fig. 12
Left Clamp and Right Clamp	GF-A-LC-RC-xx	Fig. 13
Right Clamp and Right Clamp	GF-A-RC-RC-xx	Fig. 14
Left Clamp and Left Clamp	GF-A-LC-LC-xx	Fig. 15

Table 3: GF-A part numbering scheme. Specify litz wire length [xx] in mm.

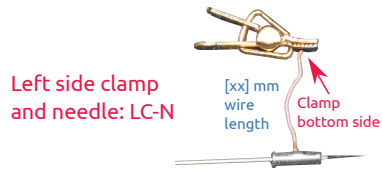


Figure 11: **GF-A-LC-N-xx**

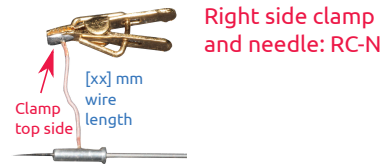


Figure 12: **GF-A-RC-N-xx**

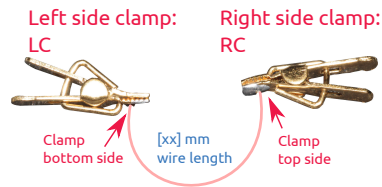


Figure 13: **GF-A-LC-RC-xx**

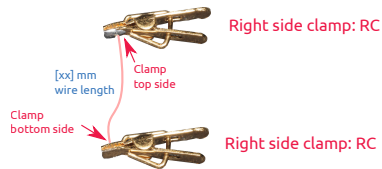


Figure 14: **GF-A-RC-RC-xx**

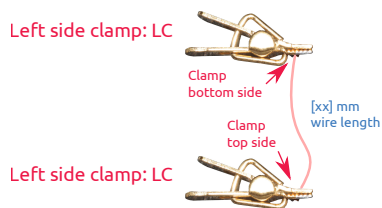


Figure 15: **GF-A-LC-LC-xx**

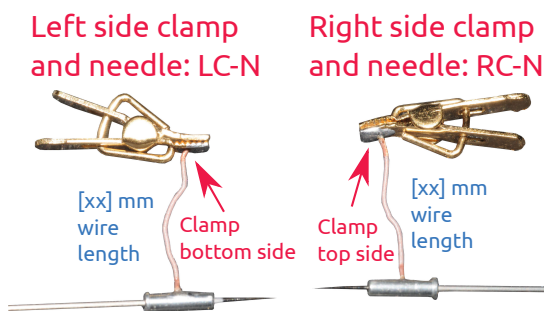


Figure 10: **GF-A-LC-N-xx** and **GF-A-RC-N-x**

General

The product data contained in this data-sheet is exclusively intended for technically trained staff. You and your technical departments will have to evaluate the suitability of the product for the intended application and the completeness of the product data with respect to such application. Our products are solely intended to be commercially used internally and should not be sold to consumers. This data-sheet is describing the specifications of our products for which a warranty is being granted by HPPI GmbH. Any such warranty is granted exclusively pursuant to the terms and conditions of the respective supply agreement. There will be no guarantee of any kind for the product and its specifications. For further information on technology, specific applications of our product, delivery terms, conditions and prices please contact HPPI:

High Power Pulse Instruments GmbH
 Stadlerstrasse 6A
 D-85540 Haar, Germany
 Phone : +49 (0)89 8780698 - 440
 Fax : +49 (0)89 8780698 - 444
 E-Mail : info@hppi.de

Due to technical requirements our products and/or their application may be harmful. For information please read carefully the manual or contact HPPI. Safety notes in the manual will inform you about possible risks that result from any foreseeable application of our products. Changes of this data-sheet are reserved.