GI2 系列（GI2 Series）

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1	2024/9/20	初版制作	覃丽	A00
2	2025/6/20	新增规格	刘方园	A01
3	2026/5/12	新增卧式针座	刘方园	A02
4	2026/8/5	新增簧端子高脚	刘方园	A03

1. 简介 Introduction

本应用规格书介绍了我司 2517 系列的单排线对板产品的产品型号、产品安装基准、端子的适用导线和压接指导。

This specification covers the requirements for application of 2517 series wire-to-board interconnections, include part No., product installation basis, applicable conductor and crimping instructions for terminals.

2. 产品描述 Product Description

按本公司一般产品叫法命名：

全套连接器的插入端称之为公端或插头，被插入端称之为母端或者针座，公端的主体塑件称之为孔座，公端内的端子称之为簧端子，母端的主体塑件称之为母座，母端内的端子称之为针端子，两端的防脱插销称之为锁片（两端锁片不一样时，公端对应的锁片称之为公锁片，母端对应的锁片称之为母锁片）。按此名称对应产品型号如下：

Product Naming:

Male side means the inserting side of the connector or plug; female side means the inserted side or header side. Major housing of the male side is named plug housing, and the mating terminal is named socket terminal. Major housing of the female side is named receptacle housing, and the mating terminal is named pin terminal, and the terminal position assurance for both housings are named retainer. (If the retainers for both side housing are different, the one for plug housing is named male retainer, and the other one for receptacle housing is named female retainer.)

连接器名称 Connector name	部件名称 Part Name	产品型号 Part No.	材质 Material	备注 Notes
插头 Plug	孔座 Plug housing	HP2517G-nY/****	PA66 GWT	
	簧端子 Socket terminal	TP2517G-1301	磷铜 Phosphorus bronze	镀锡 Tin-plated
	簧端子高脚 Socket terminal	TP2517G-1303	磷铜 Phosphorus bronze	镀锡 Tin-plated
	锁片 Retainer	HC2517G-nS/****	PA66 GWT	

	防压锁片 Anti-Crush Retainer	HC2517A-nS/****	PA66 GWT	
标准版直针针座 Standard Header(Top Entry Type)	不带柱型针座 Header without a boss	HW2517G-nAm /****	PA66 GWT 黄铜 Brass	镀锡 Tin-plated
	带柱型针座 Header with a boss	HW2517G-D-nAm/****	PA66 GWT 黄铜 Brass	镀锡 Tin-plated
标准版弯针针座 Standard Header(Side Entry Type)	弯针针座 Header(Side Entry Type)	HW2517G-nQAm /****	PA66 GWT 黄铜 Brass	镀锡 Tin-plated
标准版直针针座 Standard Header(Top Entry Type)	编带针座 Header with tape	HW2517G-L-nAm /****	PA66 GWT 黄铜 Brass	镀锡 Tin-plated
加高版直针针座 Higher Header(Top Entry Type)	带柱型针座 Header with a boss	HW2517G-DH-7Am/****	PA66 GWT 黄铜 Brass	镀锡 Tin-plated
	编带针座 Header with tape	HW2517G-HL-7Am /****	PA66 GWT 黄铜 Brass	镀锡 Tin-plated

备注：n 表示孔位总数，m 表示接触件数(m=n 时，m 省略)，****表示制造码

Note: ‘n’ represents the total number of positions, ‘m’ represents the number of contacts (When m=n, m is omitted), ‘****’ represents the manufacturing code.

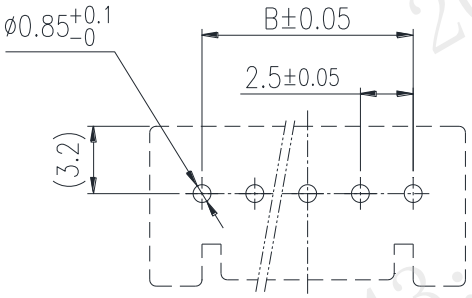
3. 端子适用导线 Applicable conductor of terminal

规格型号 Part No.	导线规格 Wire range	导体截面面积 Cross-sectional area	线皮直径 Insulation diameter
TP2517G-1301	26～22#AWG	0.15mm²～0.32mm²	Φ1.8mm MAX.
TP2517G-1303	24+24#AWG	0.2mm²+0.2mm²	Φ1.1mm MAX.

4. 针座安装基准 Installation reference of header

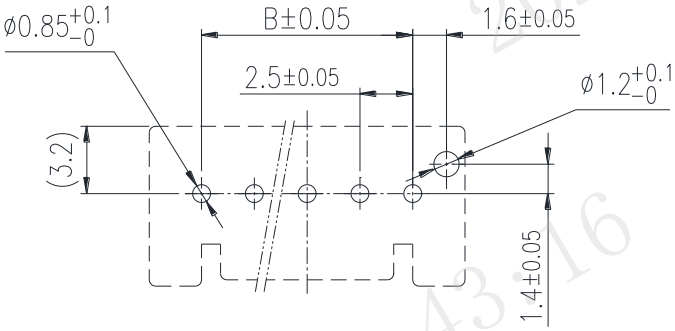
HW2517G-nAm
HW2517G-L-nAm
HW2517G-HL-7Am
PCB LAYOUT

Thickness=1.6



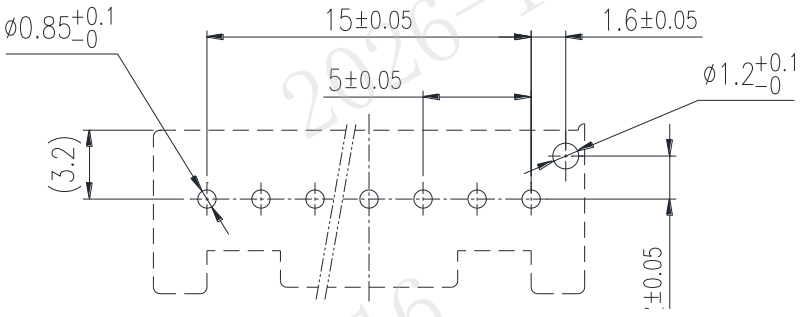
HW2517G-D-nAm
PCB LAYOUT

Thickness=1.6



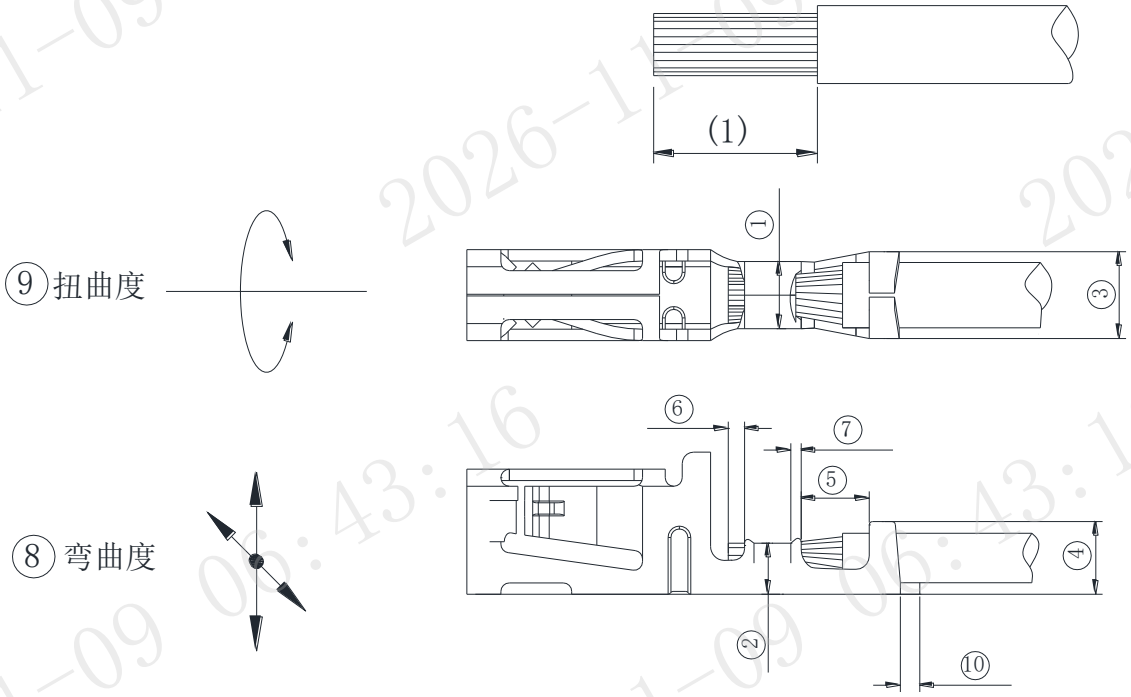
HW2517G-DH-7Am
PCB LAYOUT

Thickness=1.6



5. 产品压接指导 Product crimping guidance

5.1 压接要求 Crimping requirements



序号 No.	压接检查要素 Crimping inspection elements	技术要求 Requirement
(1)	导线剥线长度 Strip length	2.3±0.1mm
①	线芯压接宽度（CCW） Conductor crimping width	见表 1（仅供参考） See table 1（For reference only）
②	线芯压接高度（CCH） Conductor crimping height	
③	线皮的压接宽度（ICW） Insulation crimping width	
④	线皮的压接高度（ICH） Insulation crimping height	
⑤	压线脚衔接段 Transition Area	线芯和线皮需同时可见 Conductors and wire

		insulation must be visible in translation area.
⑥	导线末端漏出长度 Wire Brush	0.5±0.2mm
⑦	喇叭口 Rear Bellmouth	喇叭口必须可见且不可压伤线芯 The rear bell mouth must be visible and cannot crush the wire core
⑧	压接后弯曲度 Straightness	四向弯曲度≤2° Four-way bending≤2°
⑨	压接后扭曲度 Twist and Roll	≤3°
⑩	余料长度 Surplus length	0-0.2mm

Table 1：

单位 Unit：mm

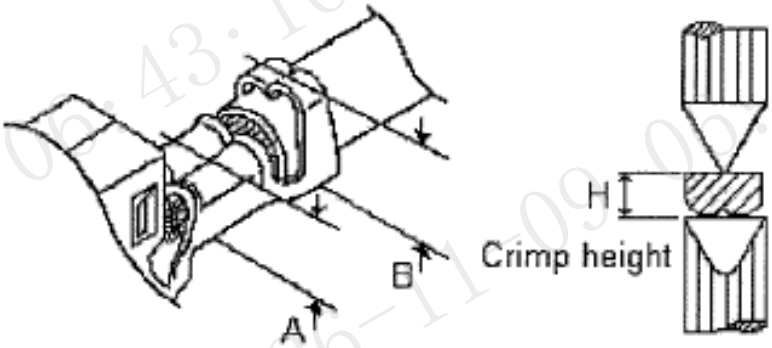
产品型号 New part No.	线芯段压接宽度 CCW	线芯段压接高度 CCH (公差 tolerance：±0.03)				线皮段的压接宽度 ICW	线皮段的压接高度 ICH
		24#+24# AWG	22# AWG	24# AWG	26# AWG		
TP2517G-1301	1.17±0.05	/	0.78	0.73	/	1.9±0.05	1.95 Max
TP2517G-1303	1.27±0.05	0.84	/	/	0.66	1.9±0.05	1.95 Max

备注：此压接标准仅供客户参考用，实际的压接高度取决于客户使用的压接模具和压接刀片。
Remarks: This crimp standard is for customer reference only. The actual crimp height depends on the crimp die and crimp blade used by customer.

5.2 检测方法 Check method

5.2.1 尺寸检查:如图一，A 为线芯段测量位置，B 为线皮段测量位置。

5.2.1 Dimension inspection: as shown in Figure 1, A is the measurement position of core section and B is the measurement position of insulation section.



图一 Figure 1

测量 A 尺寸时，应以千分尺测量，测量区域为压接形状的正中位置，以保证测量值的准确性，如图一右侧视图所示，测量结果应符合“表 1”.

测量 B 尺寸时，可用游标卡尺测量，外形尺寸符合“表 1”即可.

Use a micro caliper to measure dimension A, to assure the accuracy of the conductor crimping height measurement, measure the crimp height at the center of barrel as show in the right of Figure 1, the measurement shall be incompliance with table 1.

A vernier caliper to measure dimension B, the measurement shall be incompliance with table 1.

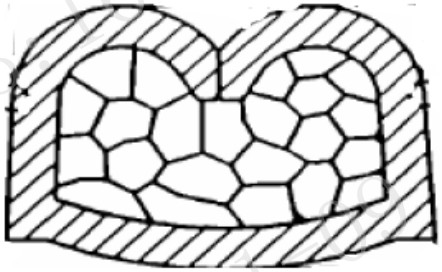
5.2.2 剖面分析 Crimping cross section analysis.

线芯段要求：

端子在制作破面时，应注意避开端子本身的浅槽，应垂直压线脚轴线.

Wire conductor requirement after crimping:

When making the cross section, make sure to keep away from the serration area of the terminal, and the cross section shall be vertical to the axis.



1.压接剖面应无孔隙，导线芯数等于压接前的芯数，每根线芯均应发生变形；

2.不可有孤岛现象.

1. Cross section must be without hole, the number of cored wires shall be same to the quantity before the crimping, and the every cored wire shall be deformed after crimping.

2. Isolated island phenomenon is not allowed.

线皮段要求：

如下图所示,端子压线脚应固定导线，且不可刺入线皮接触芯线。

Wire insulation requirement after crimping:

The insulation barrel shall hold the lead wire securely without thrust into the wire insulation and damage the cored wire.

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