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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18501.8101-2025

**Connectors for electrical and electronic equipment - Product requirements - Part 8-101:
Power connectors - Detail specification for 2-pole or 3-pole power plus 2-pole signal
shielded and sealed connectors with plastic housing for rated current of 40 A**

(English Translation)

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Figure 1 Axonometric view of 2-core and 3-core plugs

Figure 2 Axonometric view of 2-core and 3-core sockets

Figure 3 2-core 40A socket

Figure 4 3-core 40A socket

Figure 5 Socket key position

Figure 6 2-core 40A plug

Figure 7 3-core 40A plug

Figure 8 Plug key position

Figure 9 Signal contact standard specification

Figure 10 Power contact standard specification

Table 1 Climate category

Table 2 2-core 40A socket dimensions

Table 3 3-core 40A socket dimensions

Table 4 Socket key size

Table 5 2-core 40A plug size

Table 6 3-core 40A plug size

Table 7 Plug key size

Table 8 Standard gauge size

Table 9 Withstand voltage

Table 10 Vibration

Table 11 Number of test samples

Table 12 P test group

Table 13 AP test group

Table 14 BP test group

Table 15 CP test group

Table 16 DP test group

Table 17 EP test group

Table 18 GP test group

Table 19 JP test group

Table 20 KP test group

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 8-101 of GB/T 18501.GB/T 18501 has been published in the following parts.

--- Connectors for DC and low frequency analog and digital high speed data processing equipment with assessed quality Part 1: General specification (GB/T 18501.1-2001);

---Connectors for DC and low frequency analog and digital high speed data processing equipment Part 2: Circular connectors with assessed quality Sectional specification (GB/T 18501.2-2001);

--- Product requirements for connectors for electronic and electrical equipment Part 8-100.Power connectors 2-core, 3-core 20A power plus Detailed specification for 2-core signal plastic shell shielded sealed connector (GB/T 18501.8100-2025);

--- Part 8-101.Power connector 2-core, 3-core 40A power plus 2-core signal plastic shell shielded sealed connector detailed specification this document is equivalent to IEC 61076-8-101:2020 "Connectors for electronic and electrical equipment - Part 8-101.Electrical Detailed Specification for 2-core and 3-core 40A Power Source Connector plus 2-core Signal Plastic Shell Shielded Sealed Connector.

Introduction

Connectors for electronic and electrical equipment are widely used in communications, industry, and new energy vehicles, and are in great demand.

With the increasing number of signal transmission types and transmission power of gas equipment, it is necessary to ensure the reliable connection of electronic and electrical equipment and stable signal transmission.