

Applications



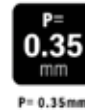
Smartphone



Smart Watches



Wireless Earbuds

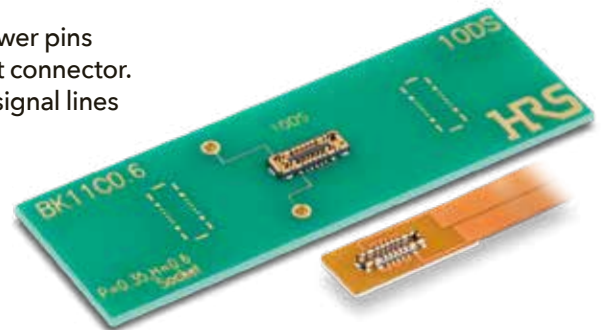


Introducing Hirose's BK11 Series—an ultra-compact FPC-to-Board connector engineered for power and performance in portable electronics. With a 0.35mm pitch, 0.6mm stacking height, and slim 1.9mm width, the BK11 delivers up to 8A total current through a multi-power hybrid layout featuring 2 main power contacts (4A) and 4 sub power contacts (2.5A).

This structure supports power delivery to multiple modules through a single connector—reducing component count and saving mounting space. Armored metal guides, reinforced solder points, and a tactile click design ensure secure, reliable mating even in compact or vibration-prone devices. Ideal for smartphones, wearables, wireless audio, and other battery-powered products, the BK11 Series offers a robust and space-saving connectivity solution.

KEY BENEFITS OF THE BK11 SERIES INCLUDE:

- A hybrid design with multi-power and signal contacts—including 2 main power pins (4A) and 4 sub power pins (2.5A)—supporting up to 8A total in one compact connector.
- Optimized to support multiple modules through one connector—reducing signal lines and saving mounting space on the board.
- A robust structure with fully armored metal guides to prevent housing damage during misalignment.
- Reinforced solder points at each power contact to increase PCB peeling strength and ensure long-term retention.
- Smooth and reliable mating with a wide self-alignment range and a clear tactile click.
- A halogen-free construction that meets IEC 61249-2-21 environmental standards.



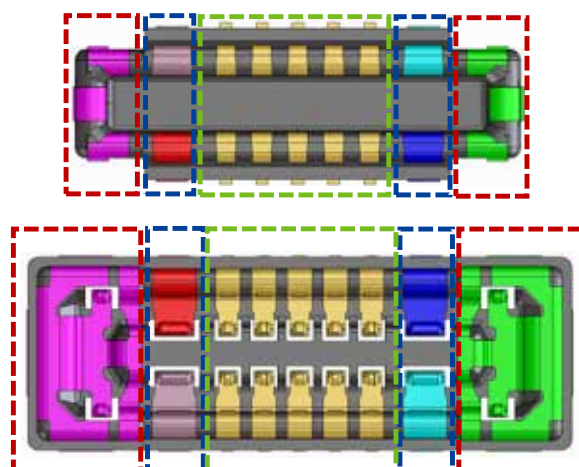
Multi-Power Contact

Multi-Power Contacts Saves Space

CLICK HERE
FOR MORE INFORMATION

CLICK HERE TO ORDER
SAMPLE NUMBER:
US-BK11SAMPLE-25

Main Power Contact 4A/pos. Signal Contact 0.3A/pos. Sub Power Contact 2.5A/pos.



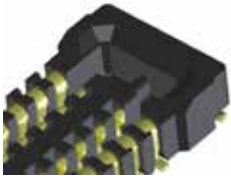
 : Main Power Contact
 : Sub Power Contact

Robust Design

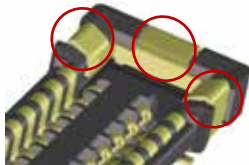
Comparison of Conventional Versus Full Armored Design

Conventional Products

No Metal Covering

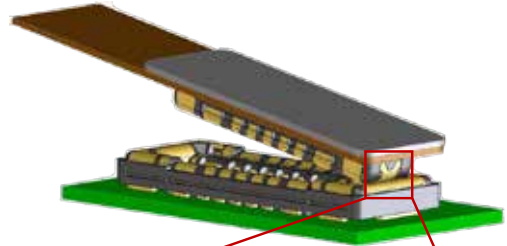


Only partially covered with metal.

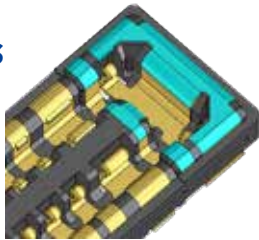


Exposed Housing

Fully Armored Design Prevents Housing Damage



BK11 Series



Housing is covered by metal

Specifications

Material/Finish

| Component | Material | Finish, Remarks |
|----------------|--------------|----------------------------------|
| Housing | LCP* | Black, UL94V -0 |
| Signal Contact | Copper alloy | Gold plated (Nickel Underplated) |
| Power Contact | Copper alloy | Gold plated (Nickel Underplated) |

*1 This product satisfies halogen free requirements defined as 900ppm maximum chlorine, 900ppm maximum bromine, and 1500ppm maximum total of chlorine and bromine.

Performance Characteristics

| | |
|-----------------------|--|
| Rated Current | Main Power Contact: 4A/pos. Sub Power Contact: 2.5A/pos. Signal Contact: 0.3A/pos. |
| Rated Voltage | 30V AC/DC |
| Operating Temperature | -55 to +85° C*2 |
| Contact Resistance | Power Contact : 30mΩ Max. Signal Contact: 50mΩ Max. |
| Withstanding Voltage | 100V AC for 1 min. |
| Insulation Resistance | 50MΩ Min. (100V DC) |
| Mating Durability | 10 times |

- No. of Pos.: Signal 10pos.+Power 6pos.

*2 Includes the temperature rise due to current flow.



For additional information please go to
www.hirose.com/product/series/BK11

Specifications herein are subject to change without notice.
Contact Hirose for latest specifications, drawings, or availabilities.

STAY CONNECTED

