

Applications:



Automotive Applications



Wearables



Medical Equipment



Compact



Floating



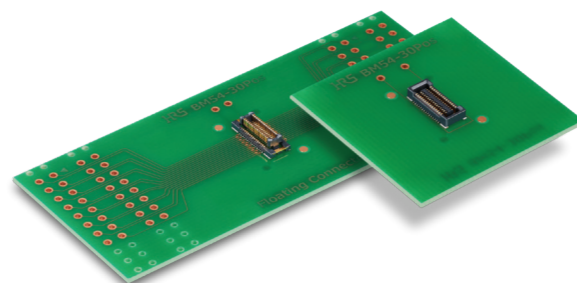
High Temp

Discover the innovation of Hirose's BM54 Series, one of the world's smallest width class floating board-to-board connectors, designed for automotive applications where precision and performance are critical.

HIGHLIGHTS:

Key attributes of the BM54 Series include:

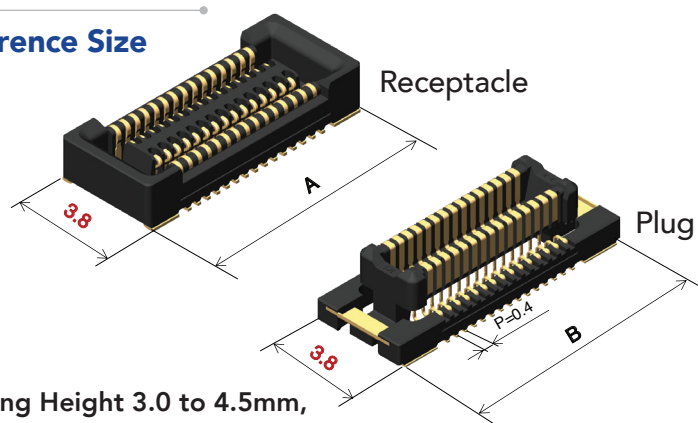
- Ultra-compact design leads its class in miniaturization, making it ideal for space-constrained environments.
- It features a floating range of $\pm 0.4\text{mm}$ in the X and Y directions to absorb misalignment, ensuring reliable connections and improving manufacturing efficiency.
- Boasts a high heat resistance up to 125°C , making it suitable for demanding environments such as automotive applications.
- It supports high-speed transmission standards like PCIe Gen 4 and MIPI D-PHY Ver.2.1, which are essential for cutting-edge electronic systems.
- Two-point contact design enhances connector reliability, mitigating dust and environmental challenges.



Floating Range (X and Y Directions)

Small Size

Reference Size



Stacking Height 3.0 to 4.5mm,
Floating Range $\pm 0.4\text{mm}$,
**World's Smallest Width Class in
Floating Board-to-Board Connectors**

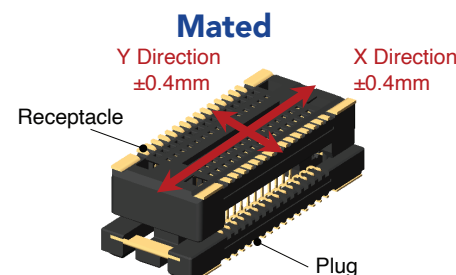
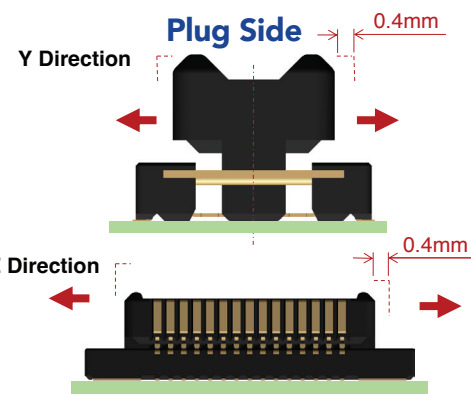
CLICK HERE
FOR MORE INFORMATION

**CLICK HERE TO ORDER
SAMPLE NUMBER:
US-BM54SAMPLE-24**

Unit : mm

No. of Pos.	A	B
10	5.0	6.0
20	7.0	8.0
30	9.0	10.0
40	11.0	12.0

*Please contact us if you have any needs
for 50 and 60 positions as well.

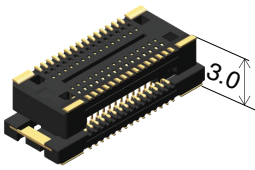
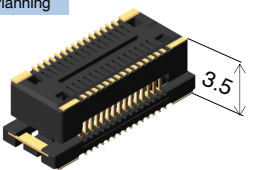
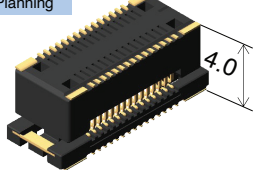
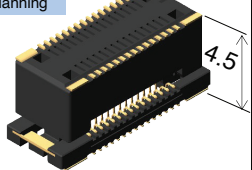


***Plug side has a floating design.**

Stacking Height Variations

Stacking Height : 3.0mm, 3.5mm, 4.0mm, 4.5mm
2 Types of Plug / 4 Types of Receptacle

Unit : mm

Receptacle Plug				
	BM54B3.0-##DS-0.4V	BM54MB3.5-##DS-0.4V	BM54MB4.0-##DS-0.4V	BM54MB4.5-##DS-0.4V
BM54F3.0-##DP-0.4V		-	-	-
BM54MF-##DP-0.4V	-			

* ##=No.of Pos.C e.g. 10, 20, 30, 40

Specifications

Material and Finish

COMPONENT	MATERIAL	FINISH, REMARKS
Insulator	LCP Resin ^{*1}	Black
Contact	Copper Alloy	Gold Plating (Nickel Under Plating)
Retention Tab	Copper Alloy	Gold Plating (Nickel Under Plating)

Performance Characteristics

Rated Current	0.3A
Rated Voltage	50V AC/DC
Operating Temperature	-55 to +125°C ^{*2}
Contact Resistance	Initial: 80mΩ Max. After the Test: 100mΩ Max.
Withstanding Voltage	100V AC for 1 min.
Insulation Resistance	100MΩ Min. (100V DC)
Mating Durability	10 times

^{*1} This product satisfies halogen free requirements defined as 900ppm maximum chlorine, 900ppm maximum bromine, and 1,500ppm maximum total of chlorine and bromine.

^{*2} Includes the temperature rising by current flow.

^{*3} Inspection Jig Connectors are under consideration. Please contact us if you have any needs.



For additional information please go to
www.hirose.com/product/series/BM54

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

STAY CONNECTED

