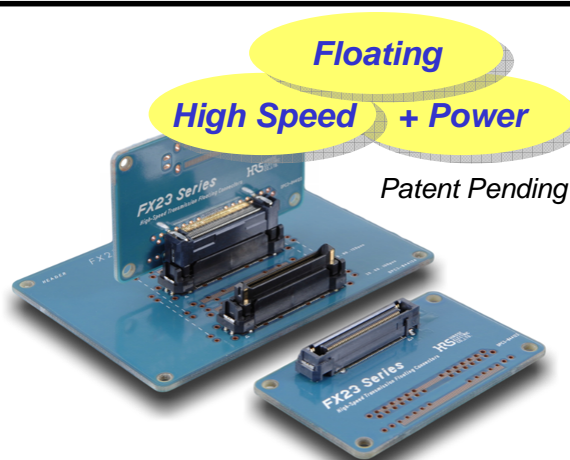


**HRS**

# FX23 Series

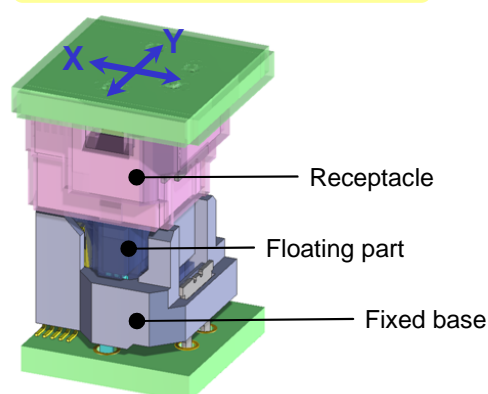
## 0.5 mm Pitch, Floating Board to Board Connectors for High Speed Transmission



### ◆ Features

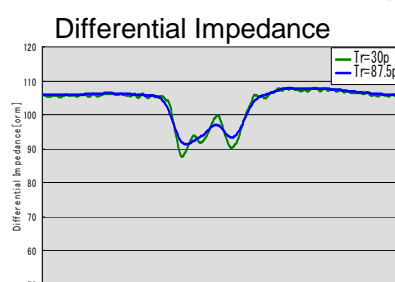
1.  $\pm 0.6$  mm max. floating in XY directions
2. High speed transmission up to 6 Gbps
3. 2 power pins are provided to each side of the connector housings (3 Amps/pin)
4. Signal terminal is rated up to 0.5 Amp/pin
5. Vertical connection and parallel connection between 15 to 30 mm PCB distance are available
6. Accepts coating agent at SMT leads
7. Excellent mating alignment with large guide posts
8. RoHS compliant

### ◆ Floating Facilitates Multiple Mounting

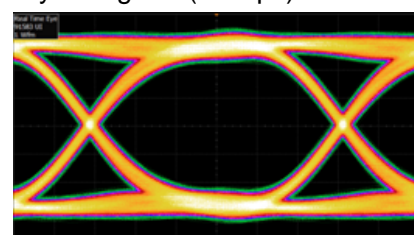
**XY directions:  $\pm 0.6$  mm**

### ◆ Differential Impedance: $100 \Omega \pm 10 \%$ [Vertical Connection Type]

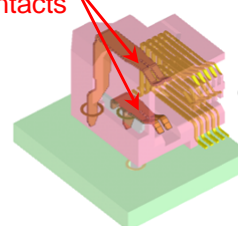
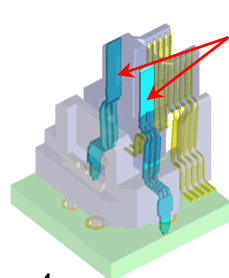
(100 ps, 10/90 %)



Eye Diagram (8 Gbps)



### ◆ Signal + Power Hybrid Saves Space

**Current Capacity: 3 Amps/pin**

If 12 Amps is carried by signal contacts,

**12A/0.5A= 24 pos.**

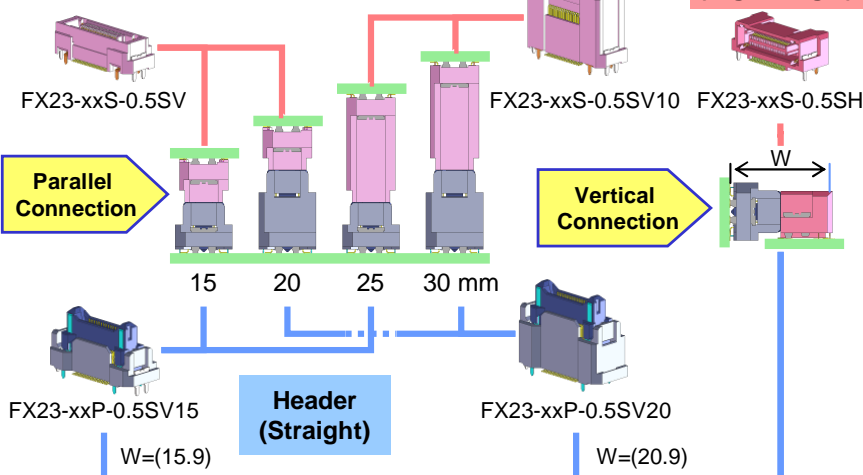
(Rated current of signal contact)

24 signal lines are sacrificed to carry the current.

### ◆ Varieties

Number of Pos.

Signal: 20, 40, 60, 80, 100, 120 pos. + Power: 4 pos.

**Receptacle (Straight)****Receptacle (Right Angle)**

### ◆ Specifications

Operating Temperature Range	-55 °C to +85 °C (include temperature rise caused by current flow)
Rated Current	Signal Contact: 0.5 Amp Power Contact: 3 Amps
Rated Voltage	AC 50 V
Insulation Resistance	100 M $\Omega$ Min. (DC 100 V)
Withstanding Voltage	AC 150V for 1 minute
Contact Resistance	Signal Contact: 70 m $\Omega$ max. Power Contact: 30 m $\Omega$ max.
Insertion / Withdrawal	100 times

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

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