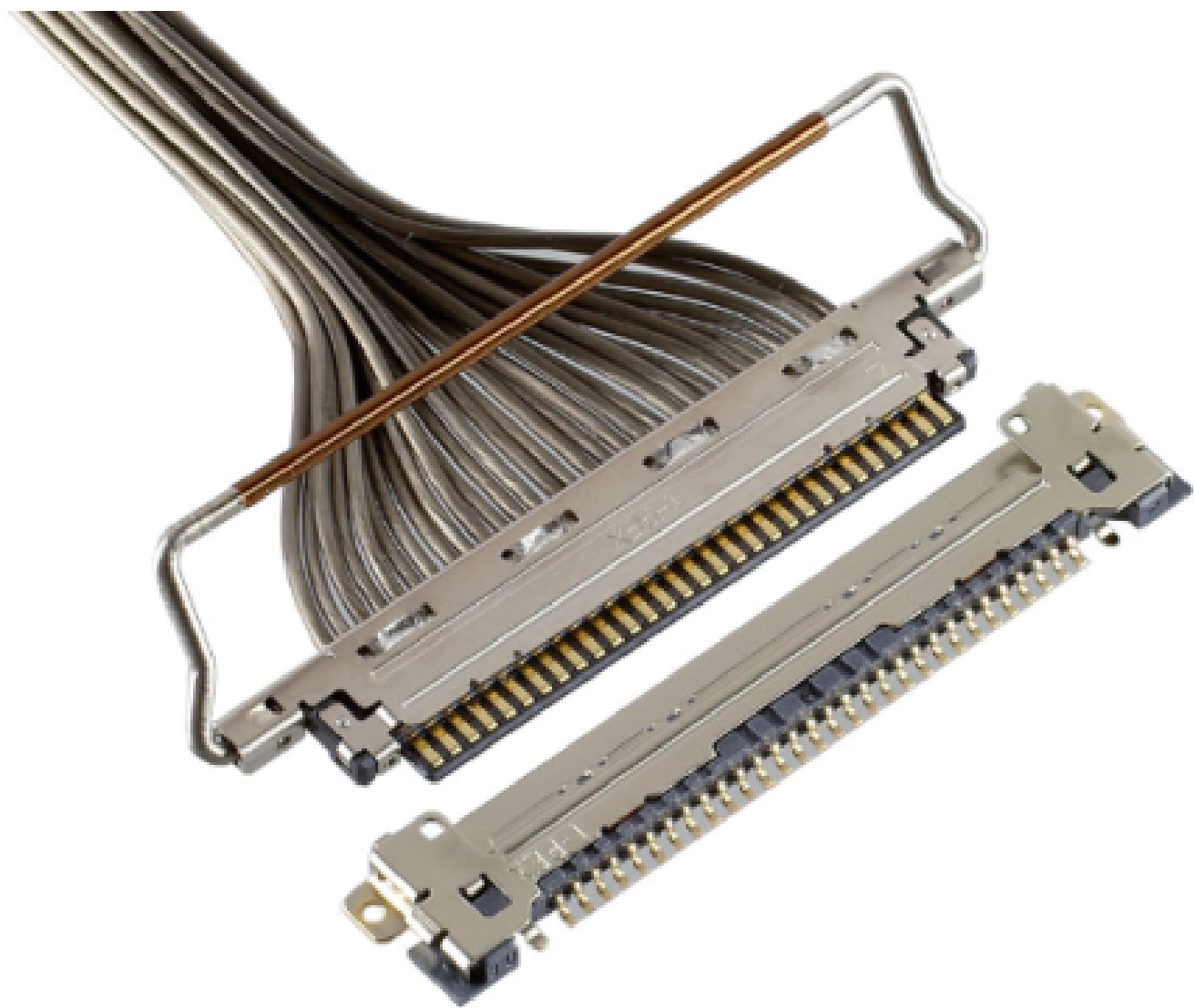


CABLINE[®]-VS

0.5 mm pitch, Micro-coax connector

CABLINE[®]-VS : Product Summary

0.5 mm pitch, Micro-coaxial connector with mechanical lock bar
16:9 display VESA standard connector.

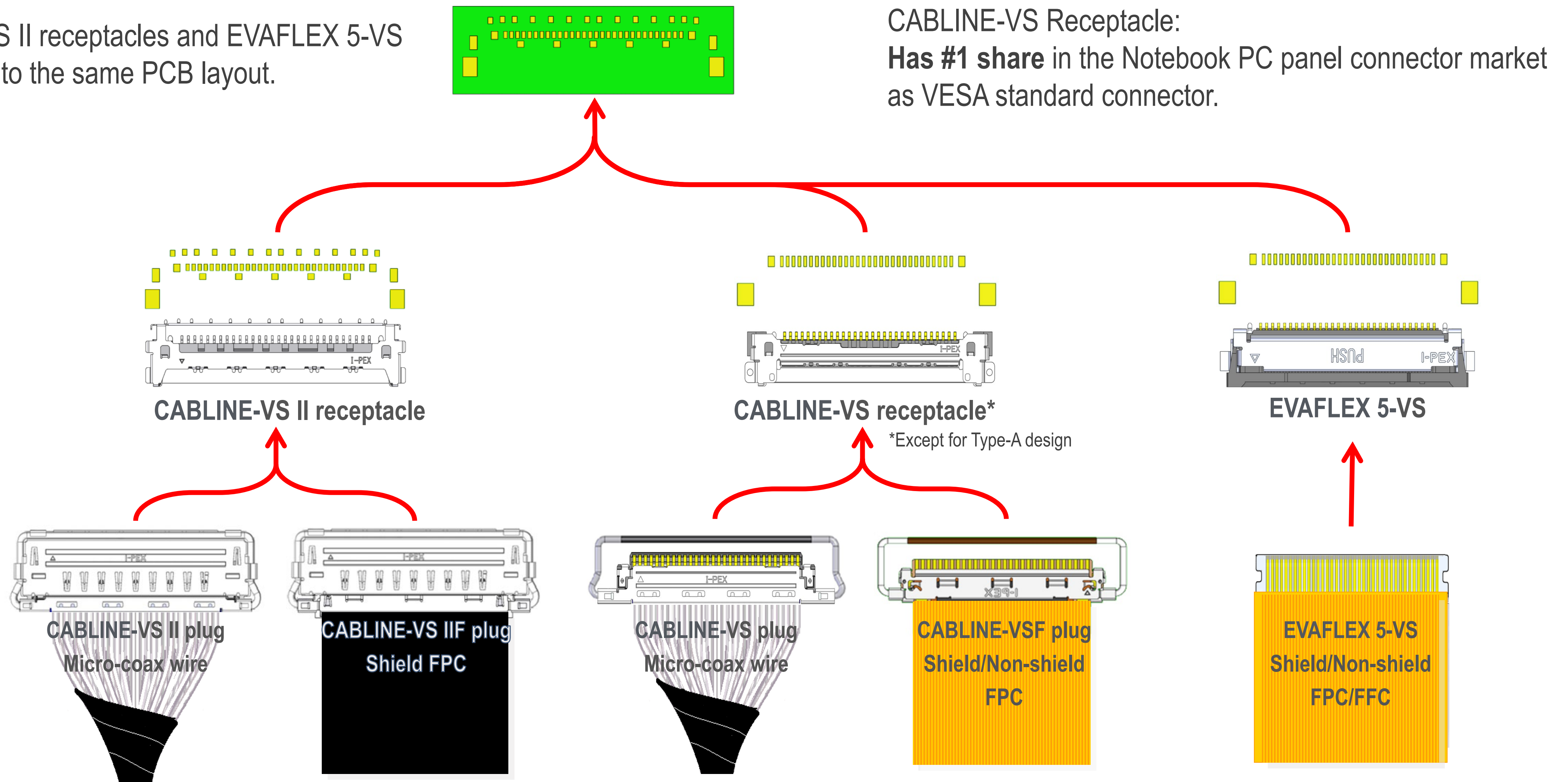


CABLINE[®]-VS

■ Name	CABLINE [®] -VS
■ Pitch	0.5 mm
■ Pin count	20, 30, 40, 50 pin
■ Mating type	Horizontal mating type
■ Mating Height	1.0 mm +/- 0.1 mm
■ Mating Depth	5.8 mm *including pull bar
■ Mating Width	7.55 mm + (0.5 * ?p) *including pull bar
■ Wire	Micro-coax 45Ω AWG #36 or smaller wire Micro-coax 50Ω AWG #38 or smaller wire Twincoax AWG #40 Discrete AWG #32 or smaller wire

I-PEX VS series (0.5 mm pitch) connector

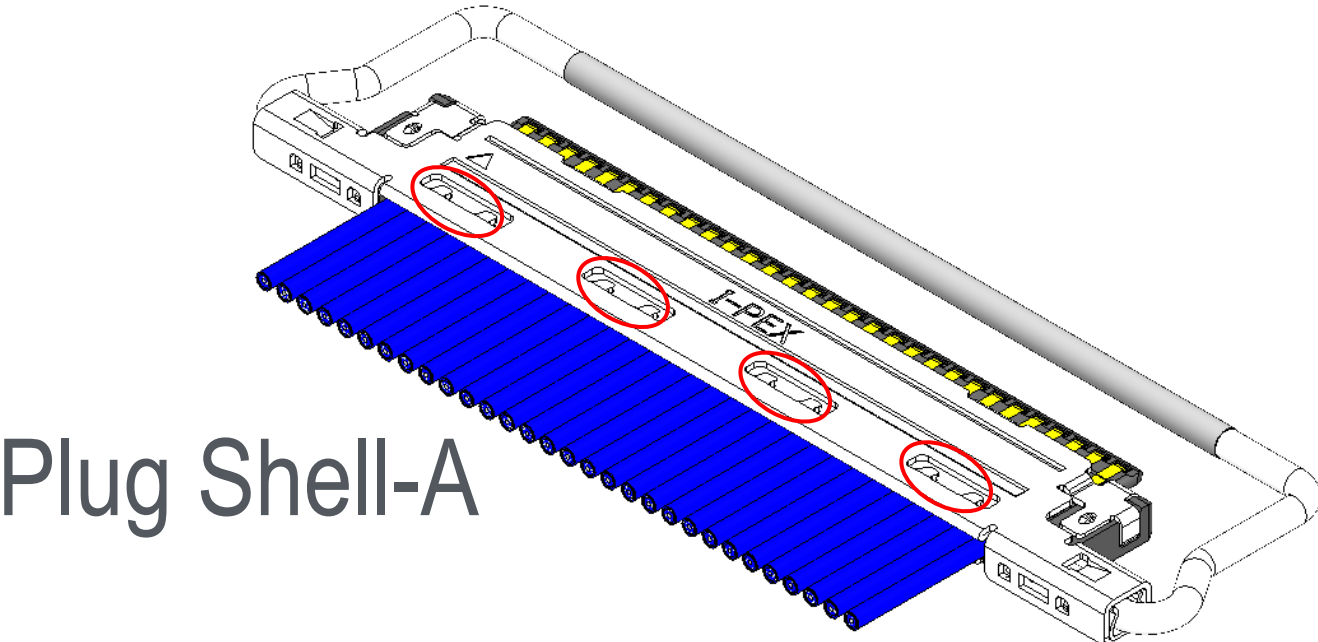
CABLINE-VS, VS II receptacles and EVAFLEX 5-VS can be mounted to the same PCB layout.





Multi ground path design

Top view

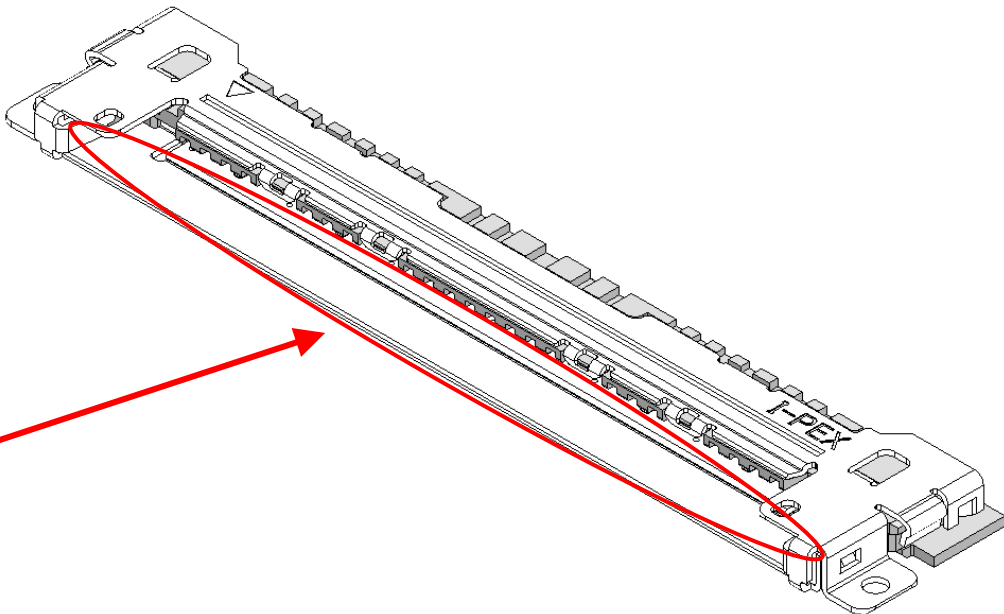


Plug Shell-A

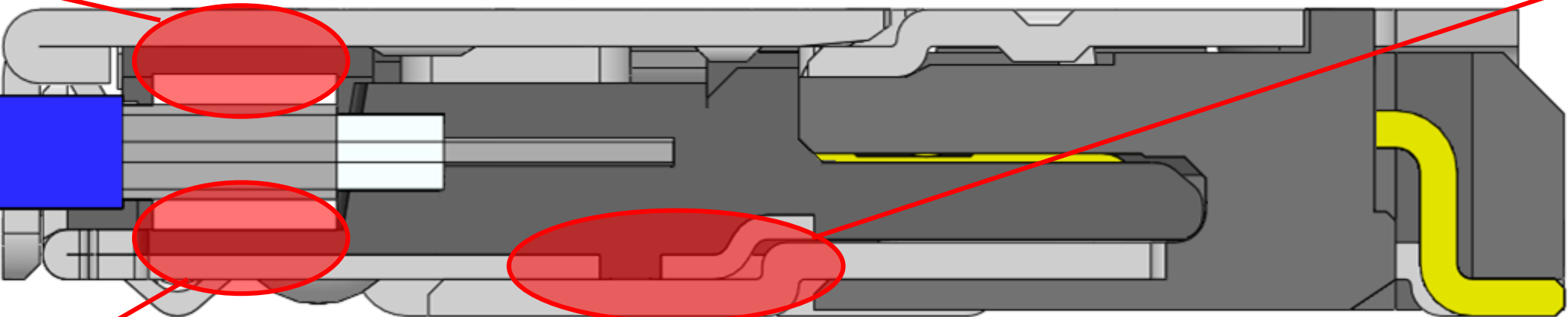
Ground points:

	20P	30P	40P	50P
GND BAR to PLUG	5 points	7 points	9 points	11 points
PLUG to RECE	11 points	15 points	19 points	23 points
RECE to PCB	4 points	4 points	4 points	4 points

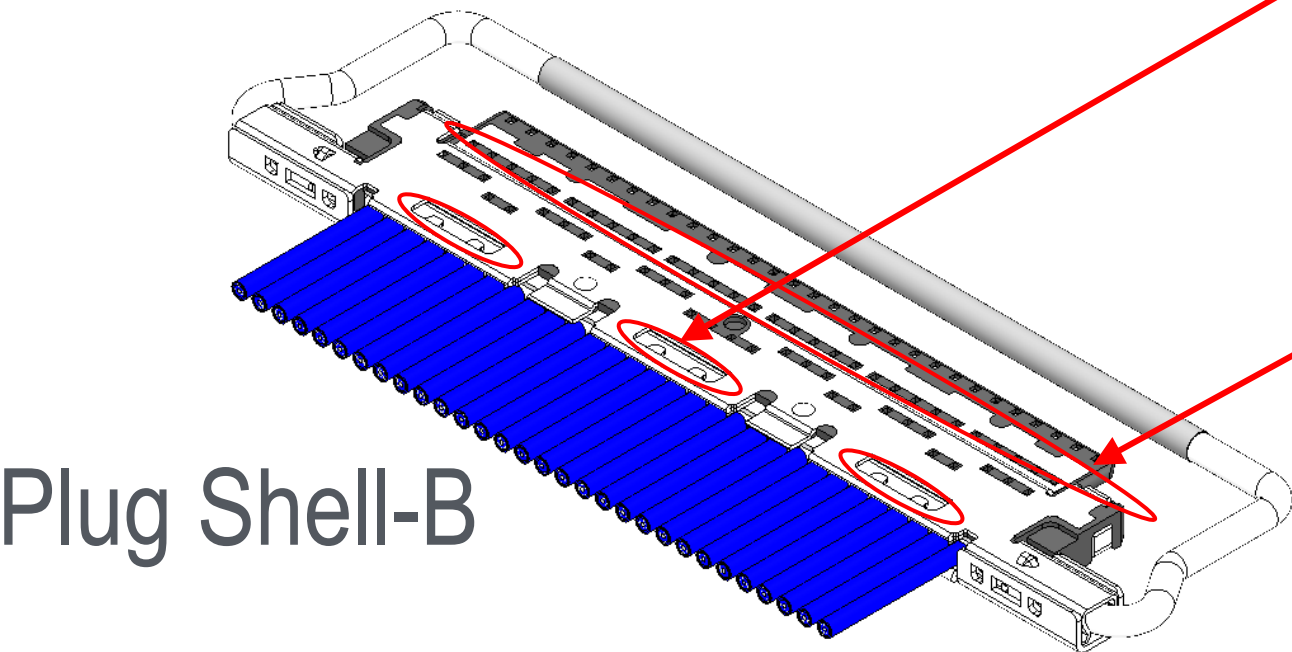
Receptacle shell



Micro-coax wire

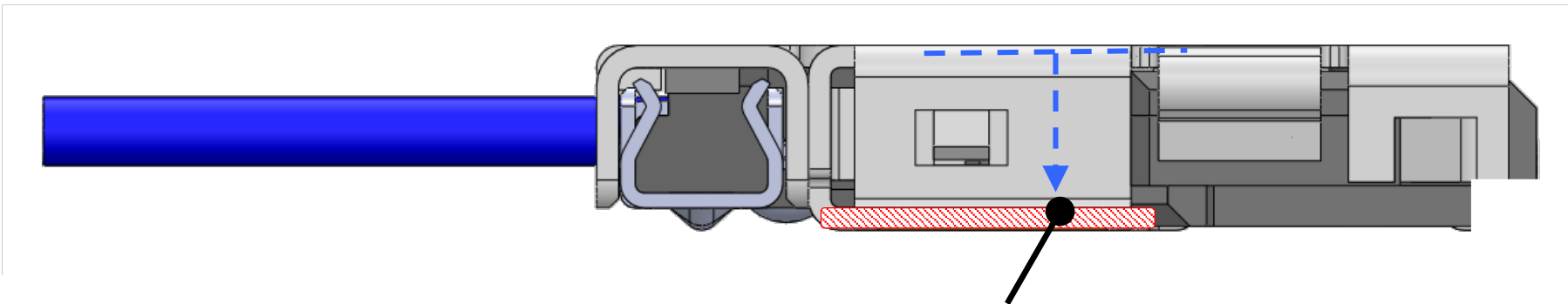


Back view



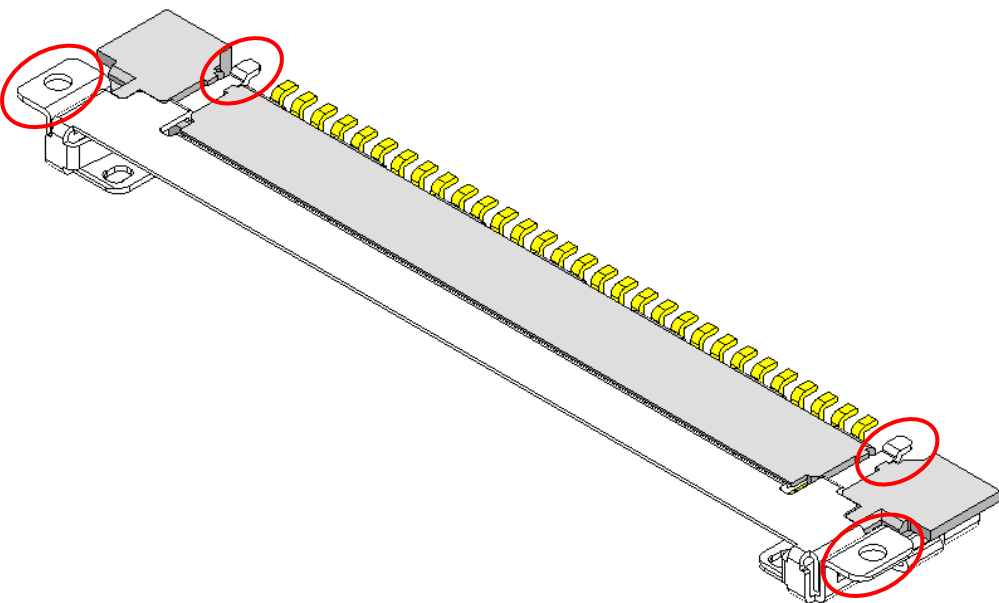
Plug Shell-B

Side view



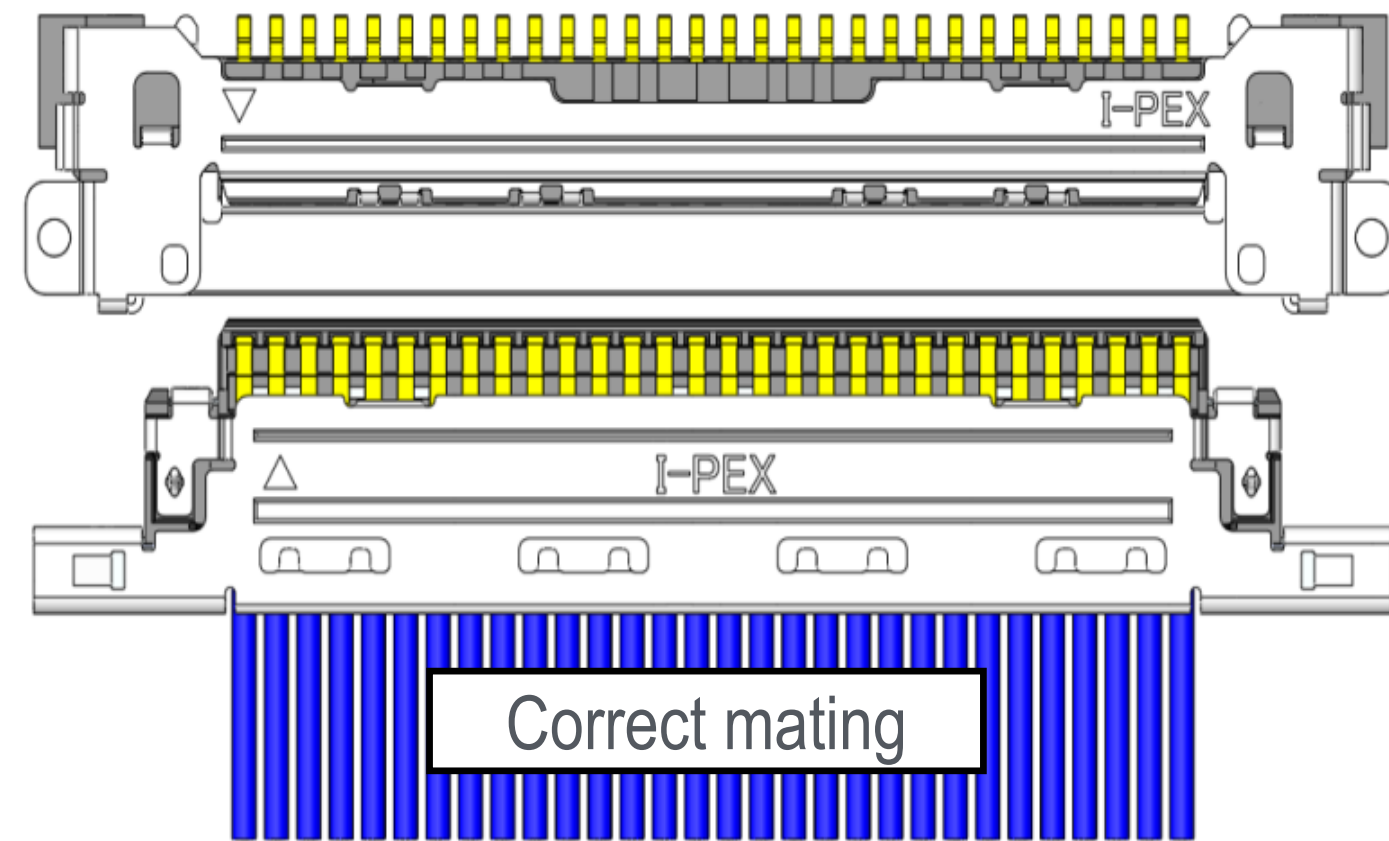
Solder paste

Back view

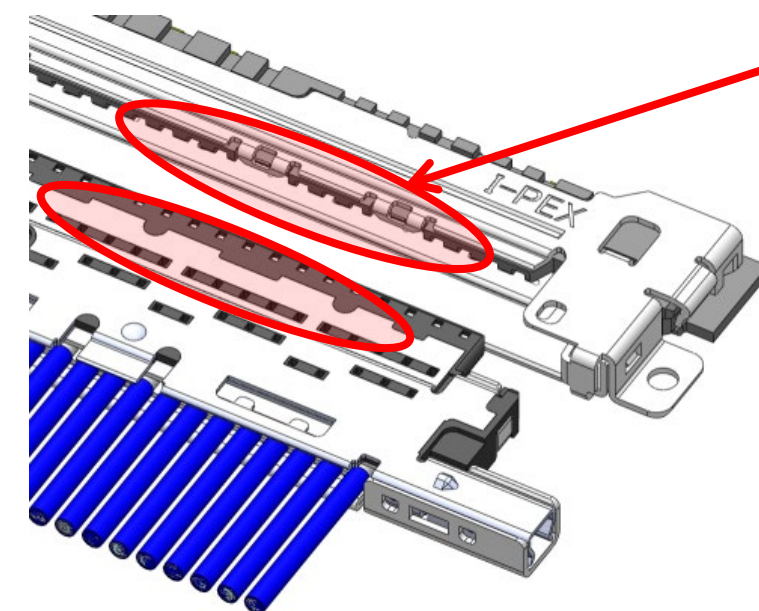
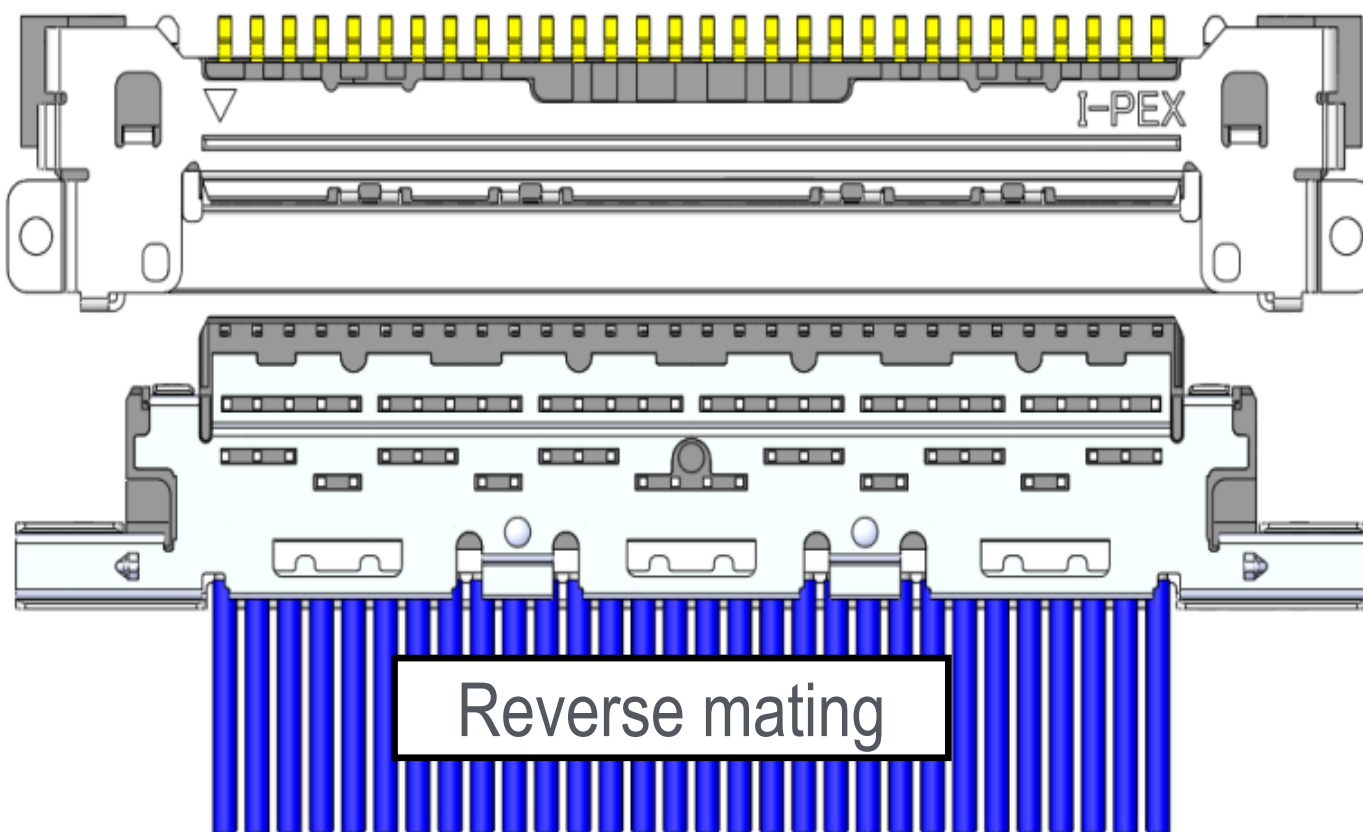
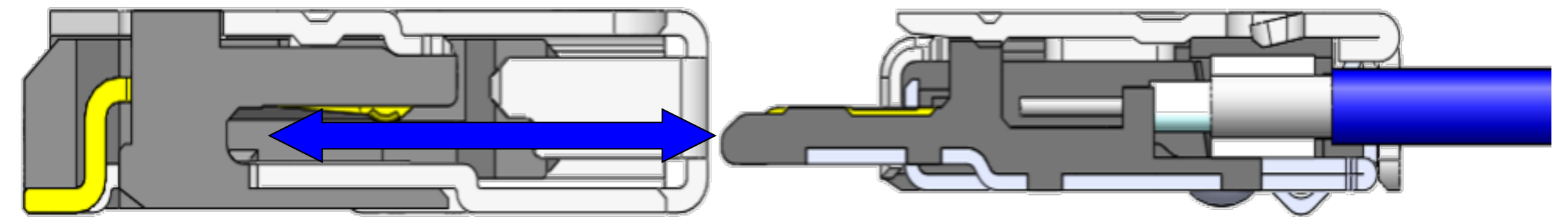


4 Ground points to PCB

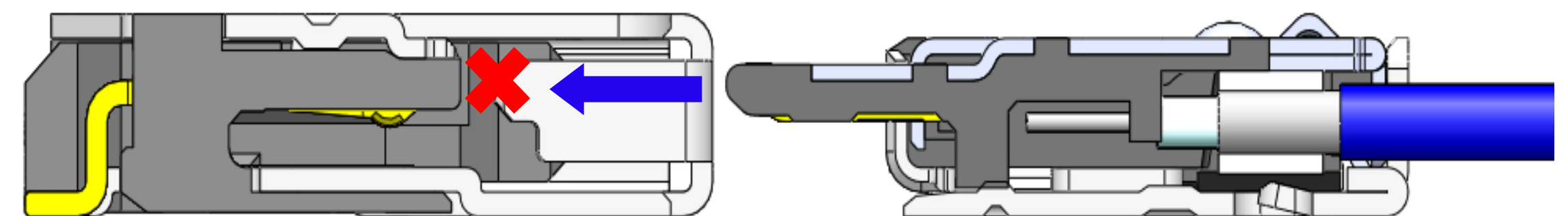
Anti reverse mating design



◆ Smooth plug insertion when plug is mated in correct way.



◆ First, Plug shell hits to Rece shell when mated reverse way.
◆ Then, Rece housing stops plug from full mating.

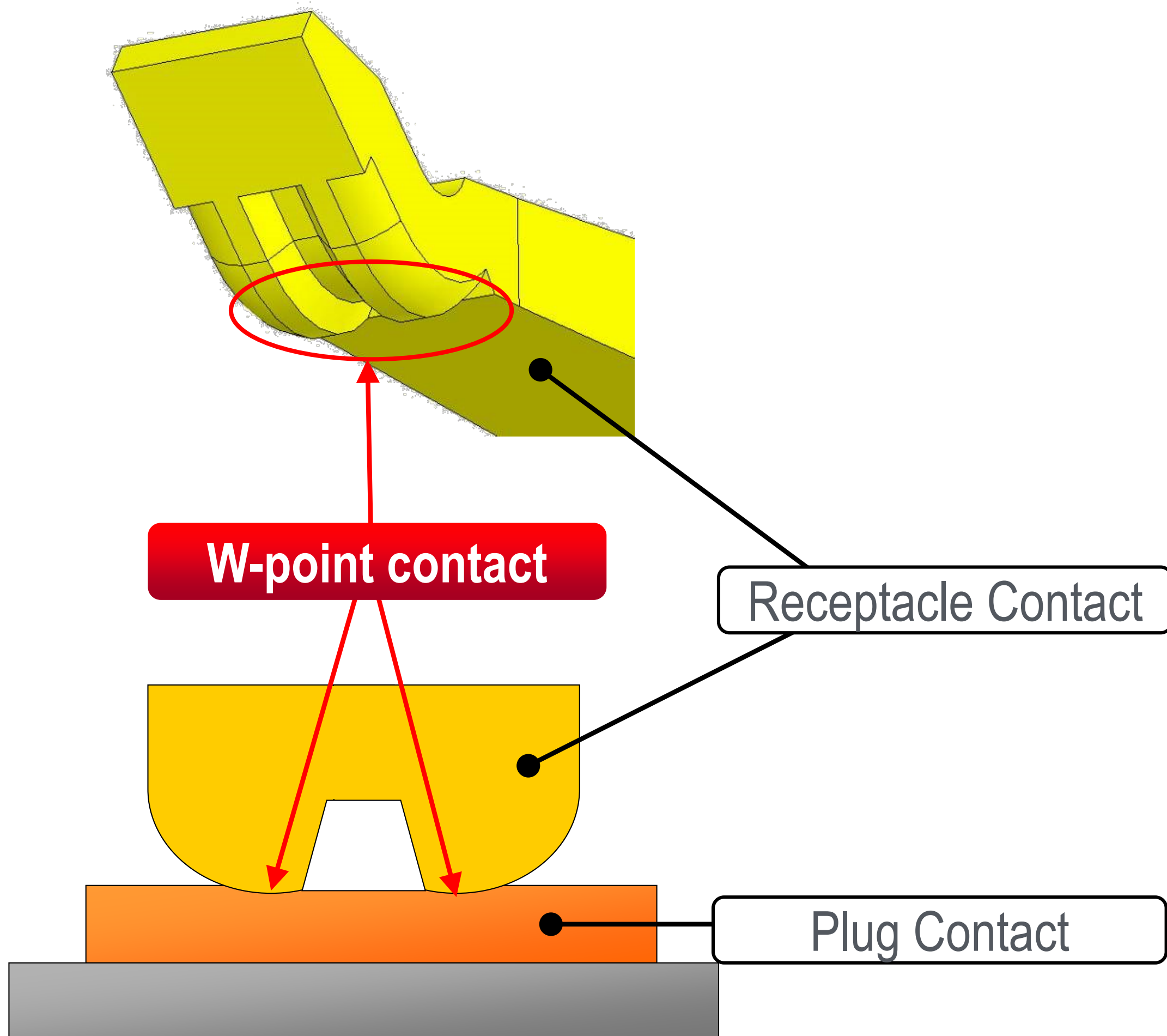


Visual Difference

Vertical offset plug design

Reliable contact design

High reliability with two points of contacts



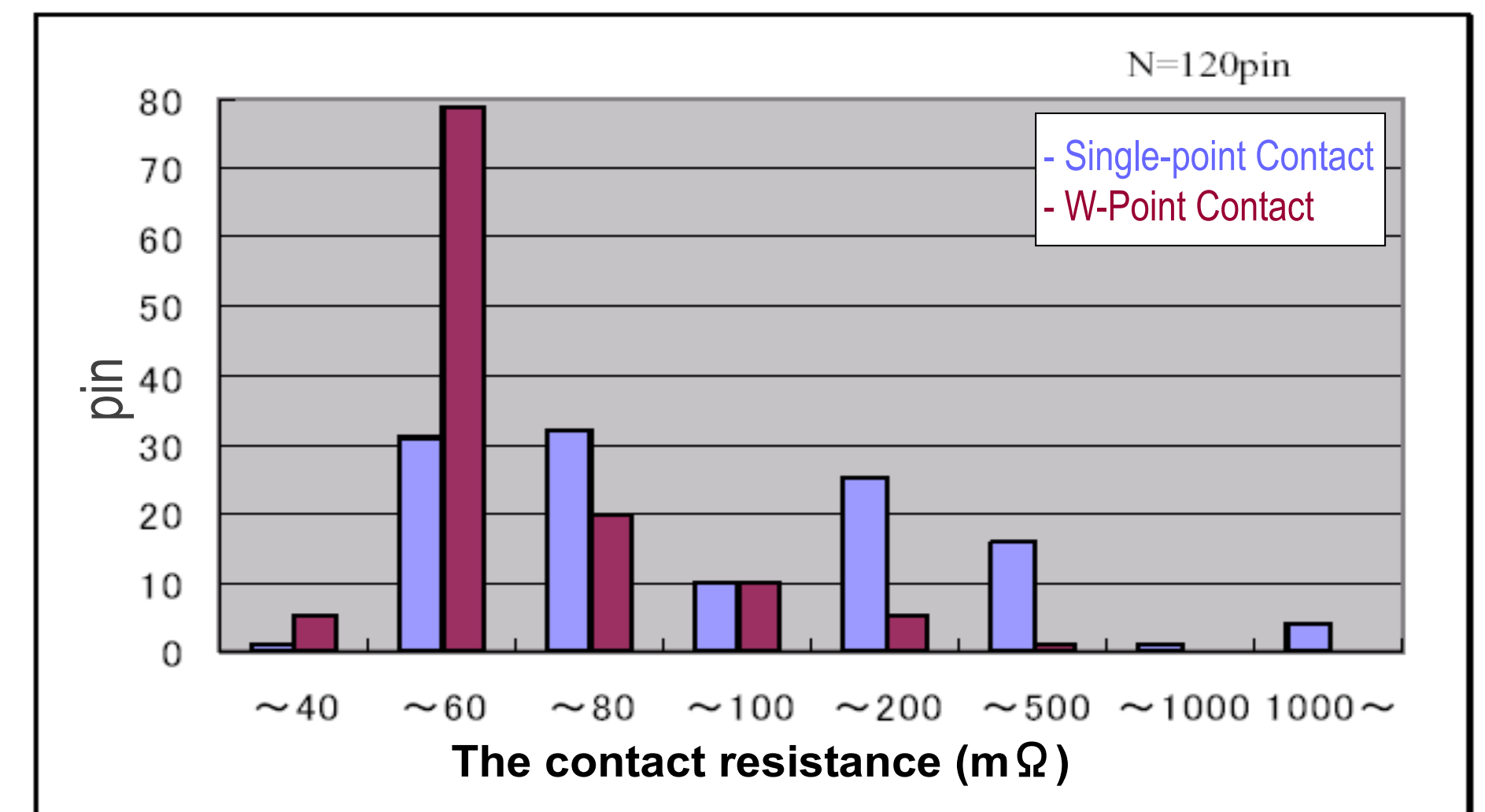
Comparison of W-point contact and single-point contact in a harsh test.

<Test method>

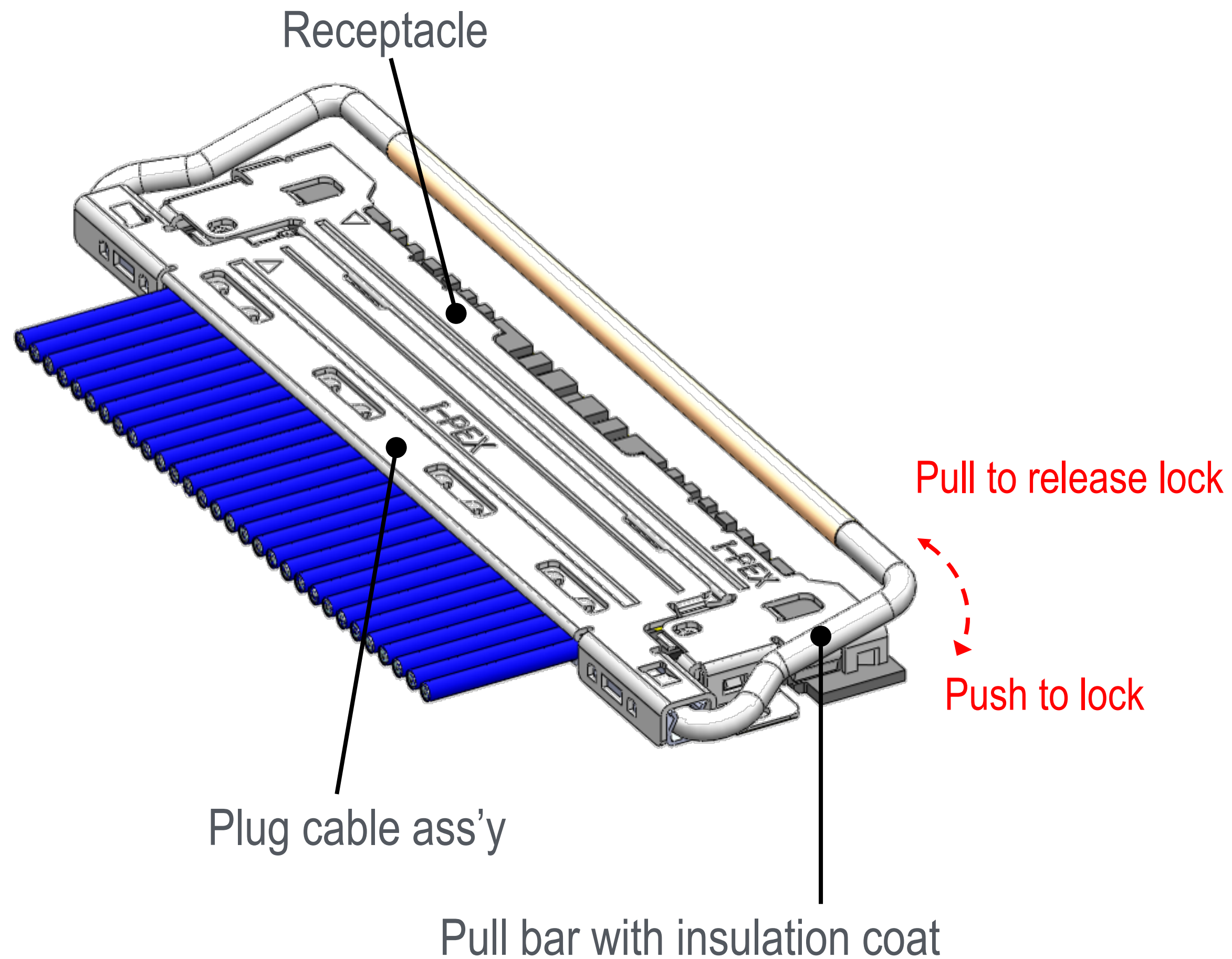
Dip plug in the flux for 1 minutes and let dry for 24 hours.
Mate plug with receptacle and measure contact resistance.

<Test Result>

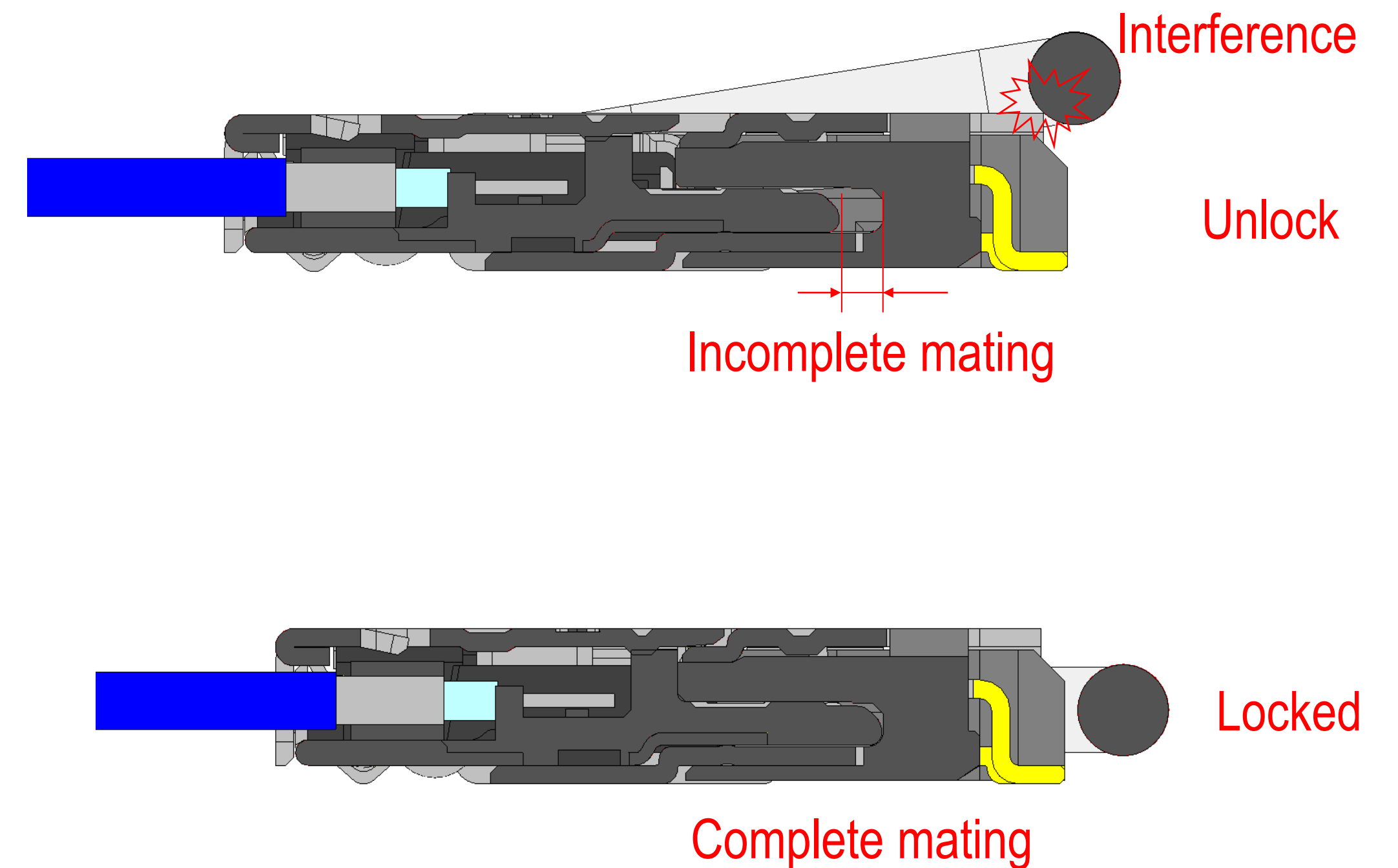
W-point contact provides better result than single-point contact.



Mechanical Lock – Pull Bar (optional)



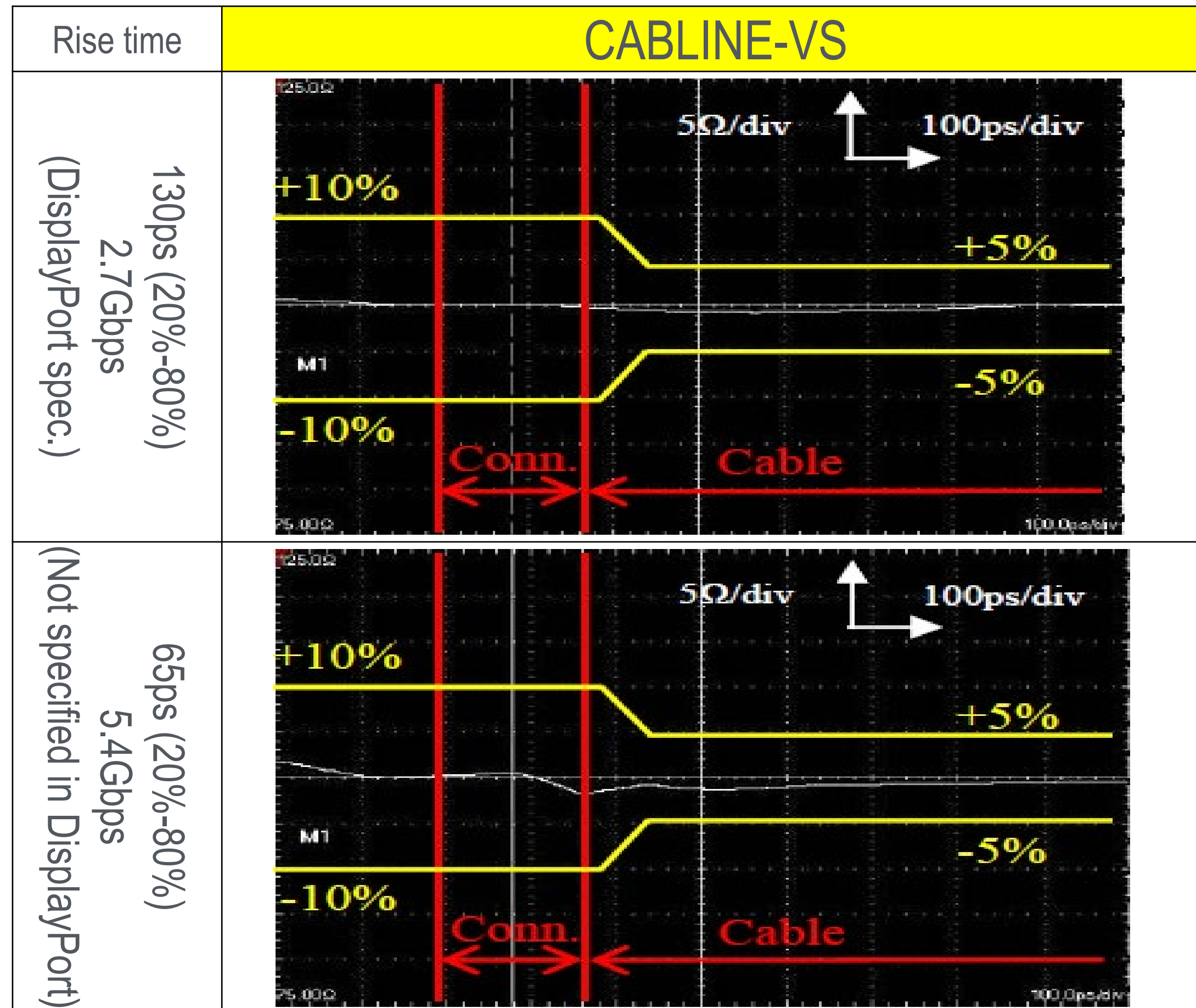
Mechanical locking bar can be locked only when plug is fully mated to receptacle.



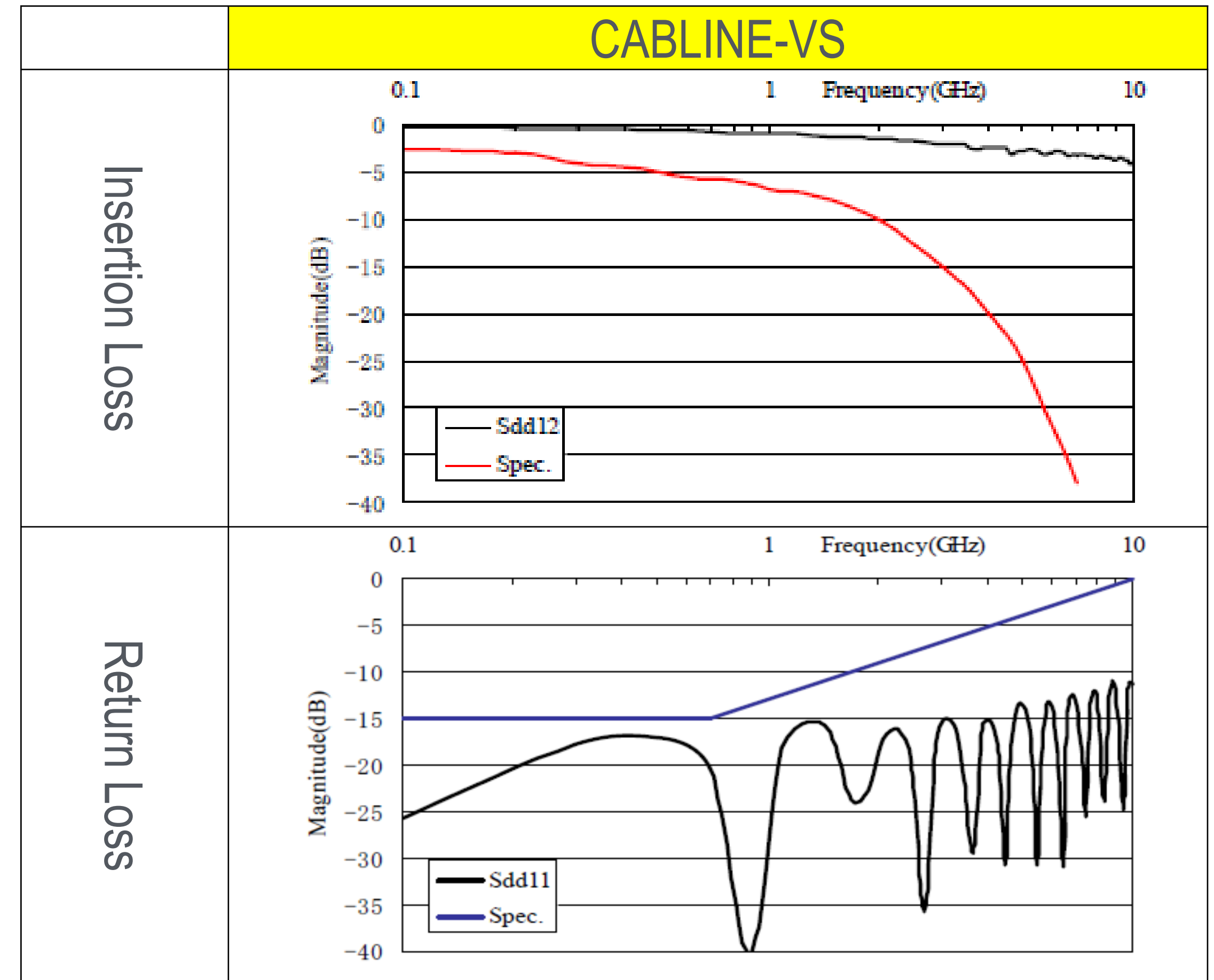
High transfer rate (VESA eDP Specification)

Micro-coax wire AWG #40
HIRAKAWA HEWTECH CORP.
L = 100mm

Characteristic Impedance



Insertion and Return Loss

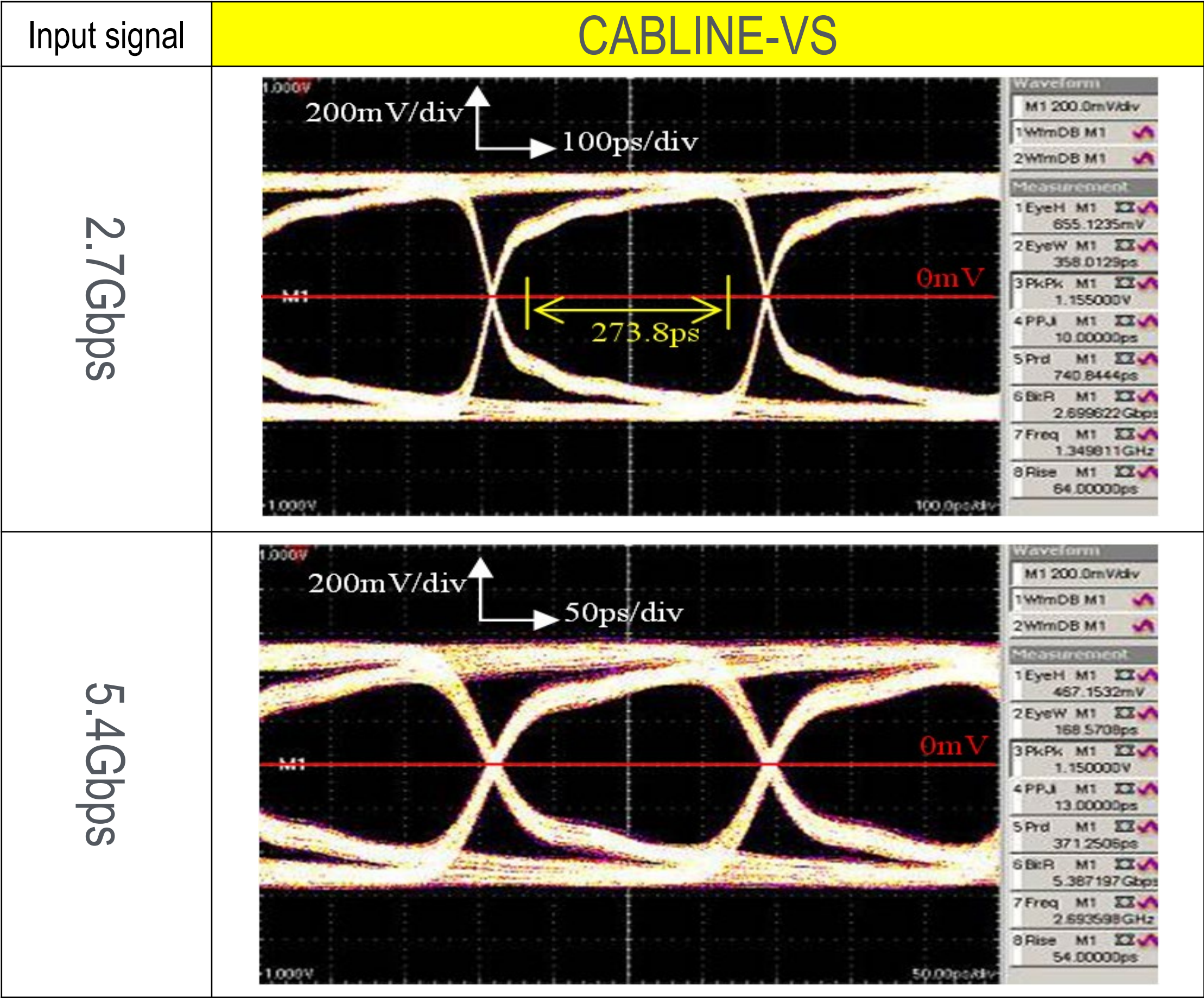




High transfer rate (VESA eDP Specification)

Micro-coax wire AWG #40
HIRAKAWA HEWTECH CORP.
L = 100mm

Eye Pattern



Eye Pattern (Differential)
Bit rate : 2.7Gbps / 5.4Gbps
Rise time : 60ps (10-90%)
Input Voltage : 1.2V



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