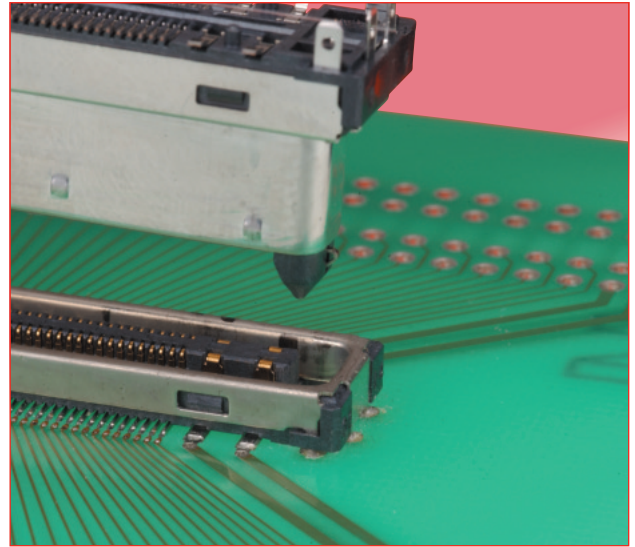


0.6 mm Pitch, Docking Station Connectors

EX80 Series



■ Features

1. Secure electrical and mechanical connection

The signal contacts wipe of 1.5 mm and built-in self-alignment assures reliable connection between plug and receptacle.

2. Sequential mating

Plug design assures correct contact engagement sequence: ground-signal-power.

3. Reliable ground connection

Guide tabs on the metal shell assure correct grounding sequence and high ground connection reliability with the board.

4. High-speed data transfer

Signals of 2.5 G bps can be transferred (PCI express).

5. Prevention of flux wicking

Terminations of the contacts are designed to prevent a possibility of flux wicking into the contact areas.

6. Self alignment

The connectors will self-align in X/Y axis within 1.2mm (0.7mm for receptacles with self-opening shutters)

7. Dedicated power supply contacts

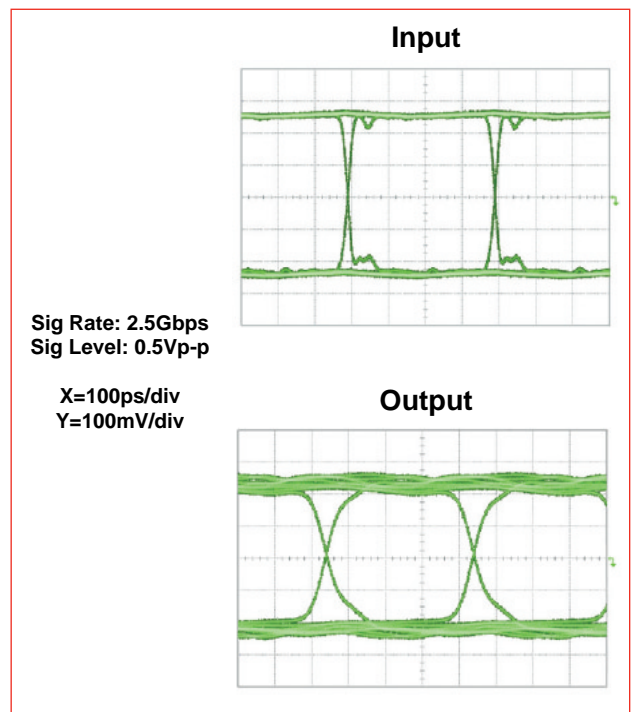
High electrical conductivity dedicated power contacts are rated 3 A.

8. High durability

Bellows contact configuration assures reliable electrical and mechanical connection for 5,000 cycles (mating/un-mating).

■ Applications

Docking stations for notebook computers and other applications requiring high reliability, high data transfer sequential mating connections.



■Product specifications

Ratings	Storage temperature range	-55°C to +85°C	
	Voltage rating	125V AC	
	Current rating	Signal contact	0.5A
Power contact		3A	

Characteristic	Specification	Conditions
1.Contact resistance	Signal contact: 70m ohms max. Power contact: 40m ohms max.	100mA
2.Insulation resistance	300M ohms min.	250V DC
3.Withstanding voltage	No flashover or insulation breakdown.	350V AC/one minute

■Materials

●Receptacles

Component	Material	Finish
Contacts	Copper alloy	Selective gold plated
Insulator	LCP	—————
Shell	Stainless steel	Tin-lead or tinned copper plated

●Plugs

Component	Material	Finish
Contacts	Copper alloy	Selective gold plated
Insulator	LCP	—————
Shell	Stainless steel	Tin-lead or tinned copper plated

■Ordering information

●Receptacles

EX 80 - 54(50) S - SH (05)

① ② ③ ④ ⑤ ⑥

●Plugs

EX 80 - 54(50) P (01)

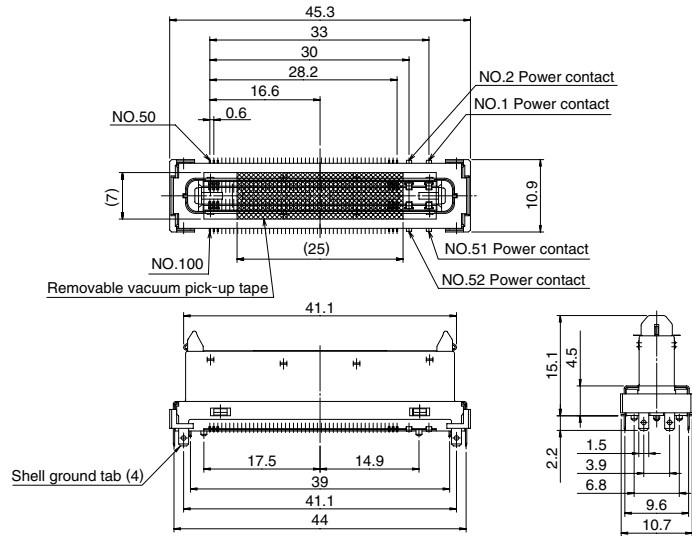
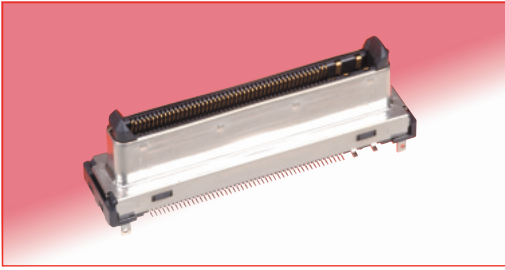
① ② ③ ④ ⑥

① Series number	: EX
② Model serial indicator 80	: Vertical SMT type
③ Number of contacts	: 54, 100, 240 : 54(50)... 50 contacts mounted in a 54-contact size
④ Connector types	S: Receptacle connectors (Shell ground tab length 0.9 mm / 1.0 mm for 240 contacts) P: Plug connectors (Shell ground tab length 0.9 mm / 1.0 mm for 240 contacts) P1: Plug connectors (Shell ground tab length 2.2 mm)
⑤ Receptacle, with shutter	SH: Built-in shutters
⑥ Separate specifications	: See the Specifications Sheet of each products.

Note: All connectors in this series are designed to be placed on the PCB 1mm min. thick.

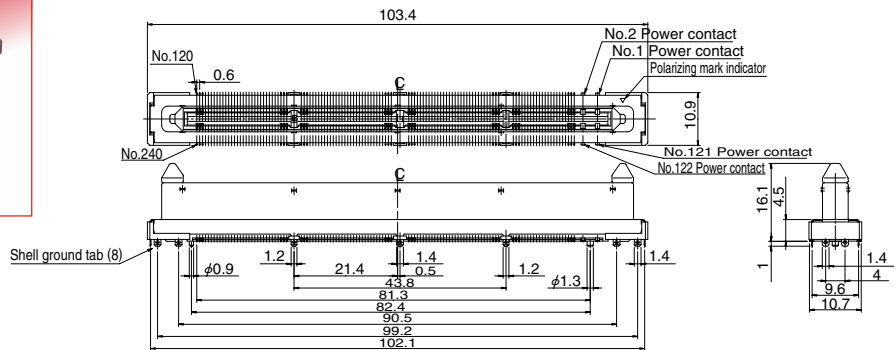
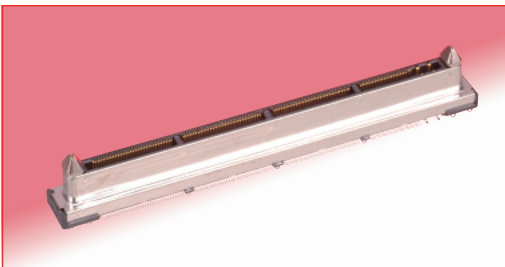
Plugs

●100 pos.



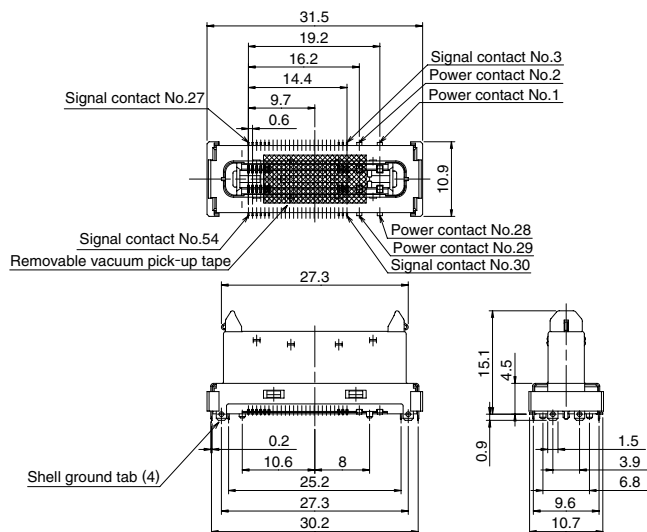
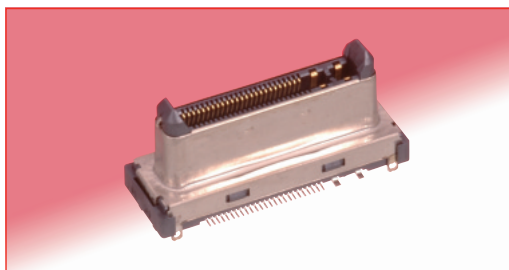
Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80-100P1	232-0598-9	Gold / Tin-lead	Tin-lead	1 piece (Tray)

●240 pos.



Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80A-240P	232-0596-3	Gold / Tin-lead	Tin-lead	1 piece (Tray)

●54 pos.

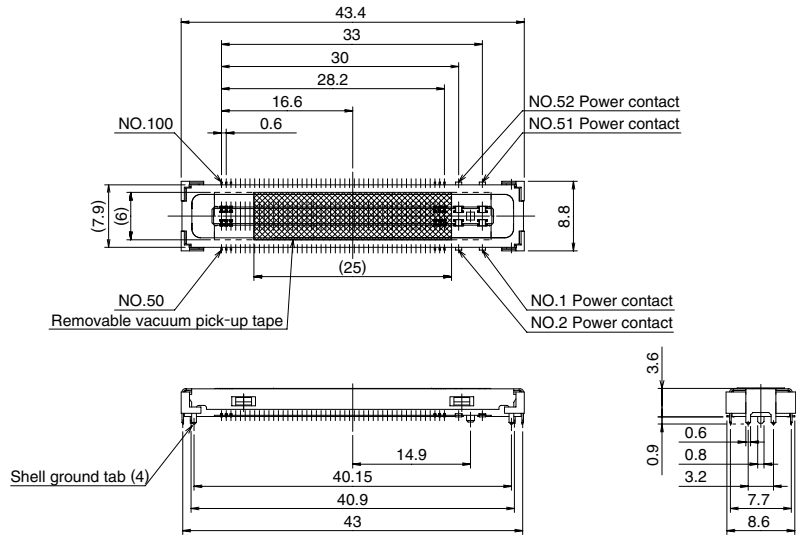
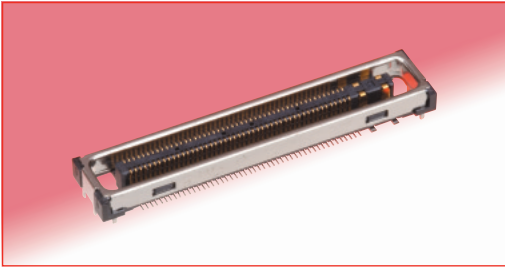


Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80-54P(01)	232-0610-2-01	Gold / Tinned copper	Tinned copper	1 piece (Tray)

Note: The design of the EX80-54P(01) does not have a detection signal contact.

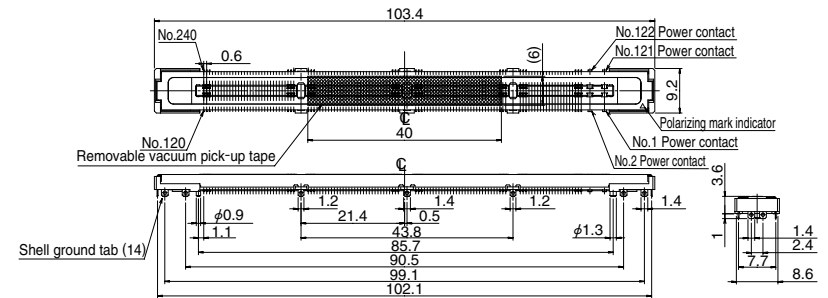
■Receptacles (Without shutter)

●100 pos.



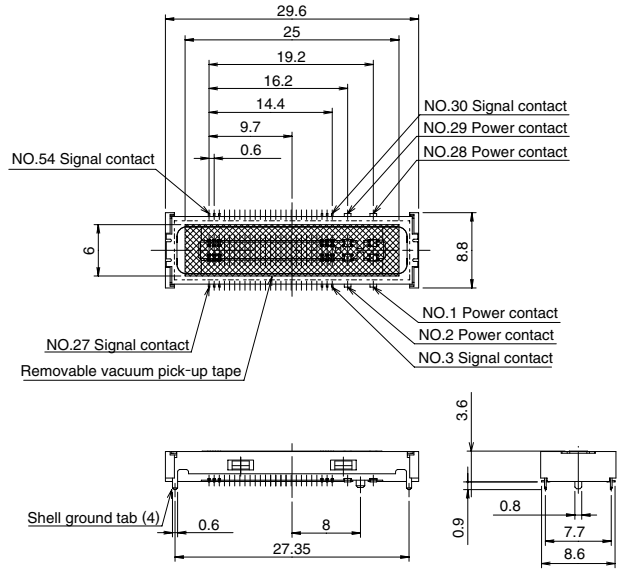
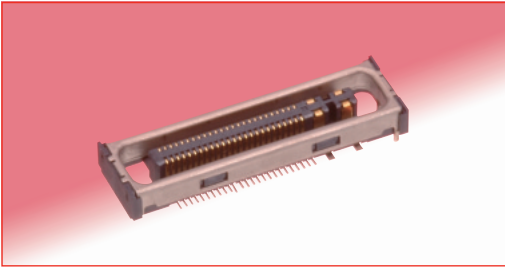
Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80-100S	232-0592-2	Gold / Tin-lead	Tin-lead	1 piece (Tray)
EX80-100S(01)	232-0592-2-01	Gold / Tin-lead	Tin-lead	1,000 pieces/reel

●240 pos.



Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80A-240S	232-0595-0	Gold / Tin-lead	Tin-lead	1 piece (Tray)

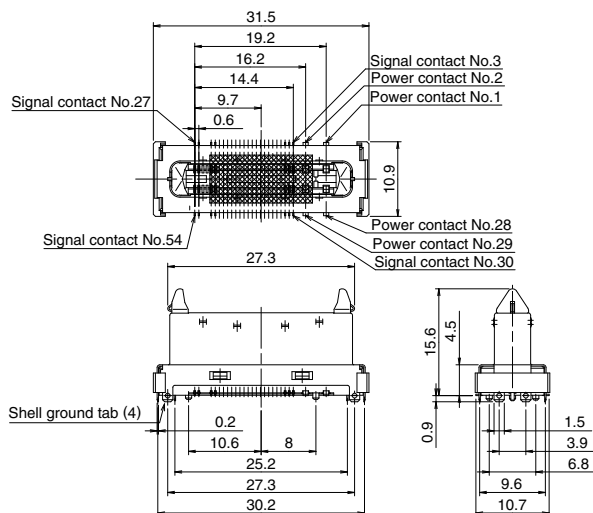
●54 pos.



Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80-54S	232-0609-3	Gold / Tinned copper	Tinned copper	1,000 pieces/reel

■ Plug

●54 pos.

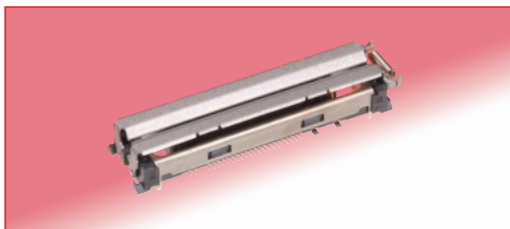


Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Packaging
EX80-54(50)P	232-0607-8	Gold / Tin-lead	Tinned copper	1 piece (Tray)

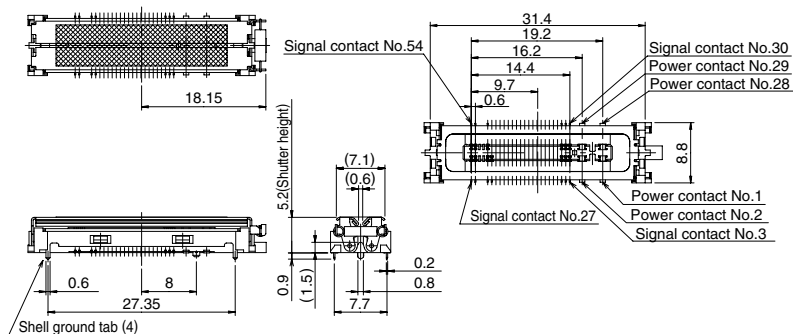
Note: The design of the EX80-54(50)P does not have a detection signal contact.

■ Receptacle (With shutter)

●54 pos.



◆ Shown without shutter

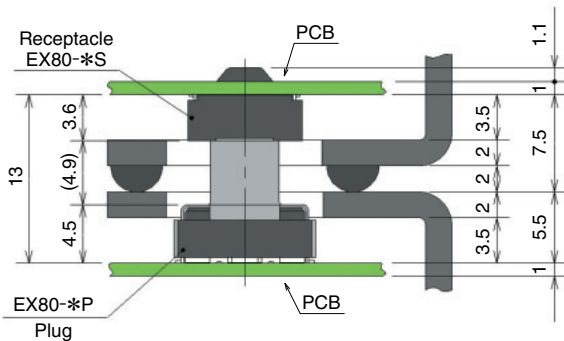


Part number	CL No.	Contact plating (contact area/termination)	Shell plating	Shutter color	Packaging
EX80-54(50)S-SH(05)	232-0606-5-05	Gold / Tin-lead	Tinned copper	Silver	500 pieces/reel
EX80-54(50)S-SH(06)	232-0606-5-06	Gold / Tin-lead	Tinned copper	Black	500 pieces/reel

■ Connector mounting condition

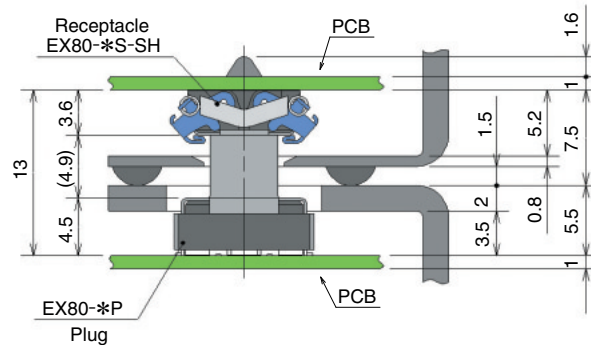
● Type without shutters

Housing mounting condition
(Shown for reference only)



● Type with shutters

Housing mounting condition
(Shown for reference only)



Note: The stacking length between boards of this connector is 13 mm.

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