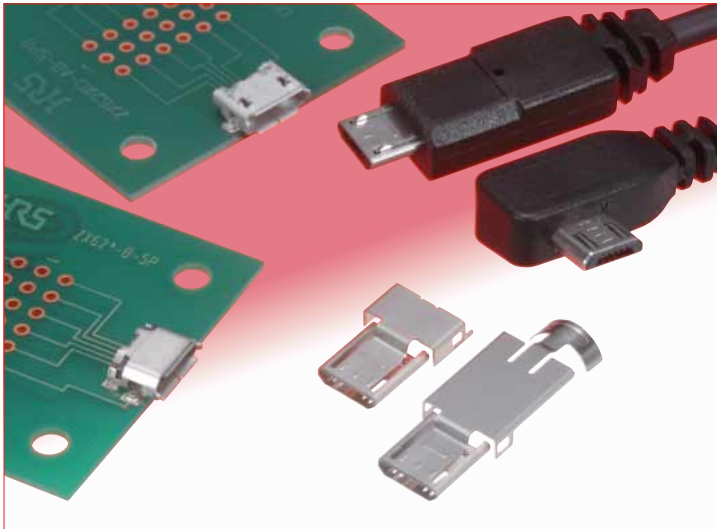


Micro-USB connectors meeting USB 2.0 Standard

ZX Series



Note : Contact us to ascertain whether a TID number has been acquired for an individual product.

Fig.1

Overview

Extremely small highly reliable connectors complying with physical, electrical and environmental requirements of Micro-USB standard (USB 2.0). Receptacles and plugs are available in a wide variety of mounting and termination styles, allowing their use in various applications.

Features

1. Size reduction

Compared with the standard Mini-USB connectors, the size of ZX connectors is reduced by approximately 60% while still allowing a high-speed data transfer of 480 Mbps, specified in USB 2.0.

2. Receptacle styles

Two interface configurations: Micro-B and Micro-AB in standard, mid-mount and reverse mounting styles. SMT and through-hole (shell) PC board terminations.

3. Plug styles

Corresponding to the receptacle styles, two interface configurations: Micro-A and Micro-B, with direct wire or PCB wire soldering. Several plug styles can be used for data transmission, earphone or charging applications.

4. Smooth mating and unmating

A smooth mating and unmating operation results in less wear and a longer product life. The unique Hirose active latch mechanism produces a reliable and durable connector.

Even after repeated use, the user will experience a smooth click sensation when mating the connectors.

Note : The statement above only applies when using both plug and receptacles made by Hirose Electric.

5. Hirose was the first company to obtain a Micro-USB certification (TID number).

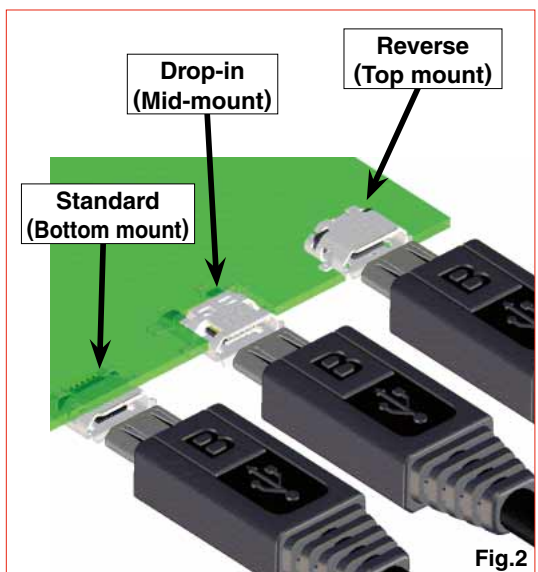


Fig.2

USB 2.0 Hi-Speed (480 Mbps)

Eye diagram measurement results :
Measured with 2.4 m long USB 2.0 cable

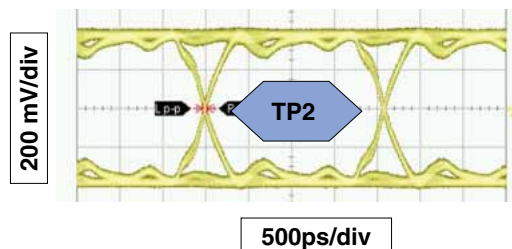


Fig.3

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Колмна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
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Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

■Product Specifications

Ratings	Current rating	1A (per contact) or 1.8A (contacts No. 1 and 5) and 0.5A (contacts No. 2, 3, and 4)	Voltage rating	30V AC
			Operating temperature range	-30°C to +85°C (Note1)
			Storage temperature range	-30°C to +60°C
Item		Specification	Conditions	
1. Contact resistance		30mΩ max.	100mA	
2. Withstanding voltage		No flashover or insulation breakdown	100V AC / 1 minute	
3. Capacitance		2pF max.	Between adjacent contacts at 1,000Hz (AC voltage)	
4. Durability		Contact resistance : Rise from initial value of 10mΩ max.	10,000 cycles	
5. Total insertion/removal force		Insertion force : 35N max., Removal force : 8N min.	Mated with corresponding connector	

Note1 : Includes temperature rise caused by current flow.
Note2 : Information contained in this catalog represents general requirements for this Series. Contact us for the drawings and specifications for a specific part number shown.

■Materials / Finish

●Receptacles

Part	Material	Finish	Remarks
Insulator	LCP	Micro-B: Black, Micro-AB: Gray	UL94V-0
Contacts	Copper alloy	Selective gold plated	_____
Shell	Stainless steel	Tin alloy plating	_____

●Plugs

Part	Material	Finish	Remarks
Insulator	LCP	Micro-B: Black, Micro-AB: Gray	UL94V-0
Contacts	Copper alloy	Selective gold plated	_____
Shell	Stainless steel	Tin alloy plating	_____

■Product Number Structure

Refer to the chart below when determining the product specifications from the product number.
Please select from the product numbers listed in this catalog when placing orders.

●Receptacles

ZX 62 RD - B - 5 P * 8
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

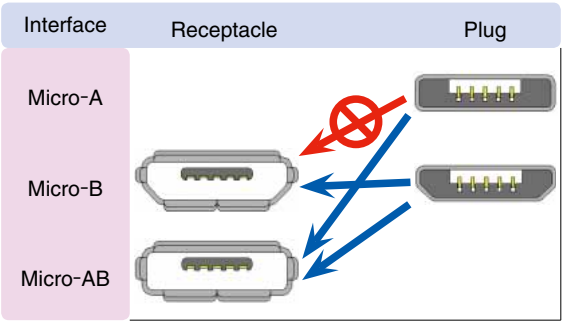
●Plugs

ZX 40 - B - 5 S * - UNIT
① ② ④ ⑤ ⑥ ⑦ ⑨

ZX 40 - B - SLDA
① ② ④ ⑨

① Series name	ZX
② Termination style	10's : Right-angle PCB wire, SMT 20's : Straight, PCB wire 40's : Direct wire 60's : Right-angle, PCB wire 80's : Cradle SMT
③ Board mounting style (Receptacles)	Blank Standard (Bottom mount) D Standard (Bottom mount) through hole R Reverse (Top mount) RD Reverse (Top mount) through hole M Drop-in (Mid-mount)
④ Mating side configuration	A Micro-A B Micro-B AB Micro-AB
⑤ Number of contacts	5
⑥ Contact type	P Receptacle- Male S Plug - Female
⑦ Serial No.	
⑧ Shell termination style -Blank Receptacles	SMT 8 Through hole (solder tab length: 0.8mm)
⑨ Components-plugs	UNIT Assembly (Insulator/contact/lock) Cover (Note 1)

Note 1 : Classifiers such as A, B, and C are entered for *.



■ Configurations

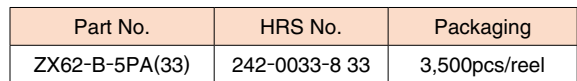
	Mating side configuration	Type		Part No.	3D Image	Page
R e c e p t a c l e s	Micro-B	Standard	SMT	ZX62-B-5PA(33)		4
			SMT + DIP	ZX62D-B-5PA8(30)		4
		Reverse	SMT	ZX62R-B-5P(30)		5
		Drop-in	SMT	ZX62M-B-5P(30)		5
	Micro-AB	Standard	SMT	ZX62-AB-5PA(31)		6
			SMT + DIP	ZX62D-AB-5P8(30)		6
		Reverse	SMT	ZX62R-AB-5P(30)		7
			SMT + DIP	ZX62RD-AB-5P8(30)		7
P l u g s	Micro-B	Direct wire soldering		Assembly (insulator/contacts/lock) : ZX40-B-5S-UNIT(31) Cover-top : ZX40-B-SLDA Cover-bottom : ZX40-SLDB		9 and 10
		PCB wire soldering (straight, through hole)		Assembly (insulator/contacts/lock) : ZX20-B-5S-UNIT(30) Cover : ZX20-B-SLDC		11
		PCB wire soldering (SMT)		Assembly (insulator/contacts/lock) : ZX64-B-5S-UNIT(31) Cover-top : ZX64-B-SLDA Cover- bottom : ZX64-SLDB		12 and 13
		PCB wire soldering (SMT)		Assembly (insulator/contacts/lock) : ZX64-B-5S-UNIT(31) Cover : ZX64-B-SLDC		12 and 13
	Micro-A	Direct wire soldering		Assembly (insulator/contacts/lock) : ZX40-A-5S-UNIT(30) Cover-top : ZX40-A-SLDA Cover- bottom : ZX40-SLDB		14 and 15
C r a d l e s	Micro-B	SMT + DIP		ZX80-B-5S(30)	With lock 	16
				ZX80-B-5SA(30)	Without lock 	16

Note : 1 Part numbers in the Plugs section of the above table list the Assembly (insulator/contacts/locks) and the corresponding Shields/Covers.

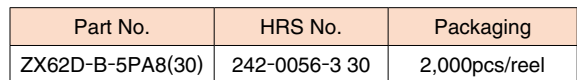
Note : 2 Optional Printed Circuit boards for the Plugs are shown for reference only. Not supplied with applicable connectors.

Note : 3 The color of the insulators body in the Assembly (insulator/contacts/lock) shown in the 3D Image column above is blue for clarity. Refer to the Materials (Page 2) for correct colors.

●Micro B - Standard (Bottom mount), Shell SMT



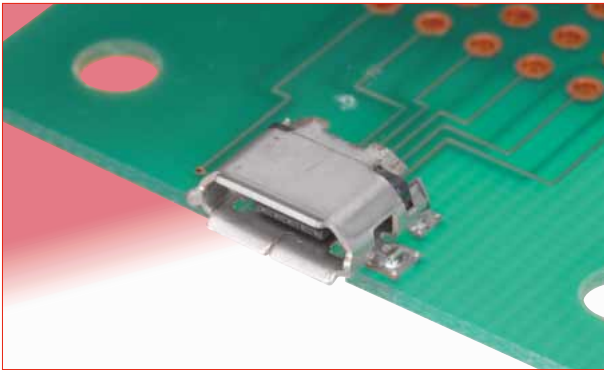
●Micro B - Standard (Bottom mount), Shell through hole



4 HRS

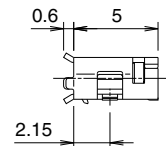
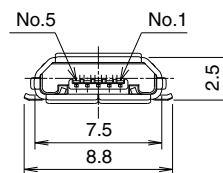
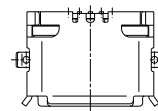
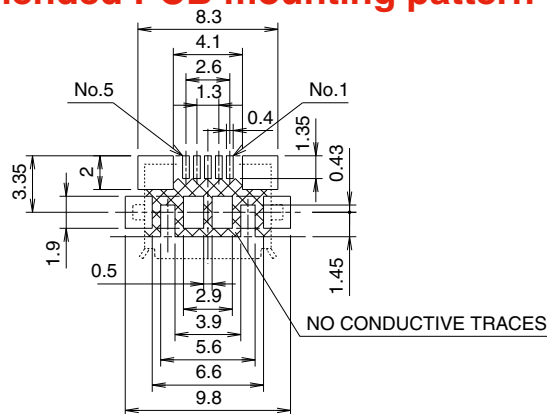
■ Receptacles

● Micro B - Reverse (Top mount) Shell SMT



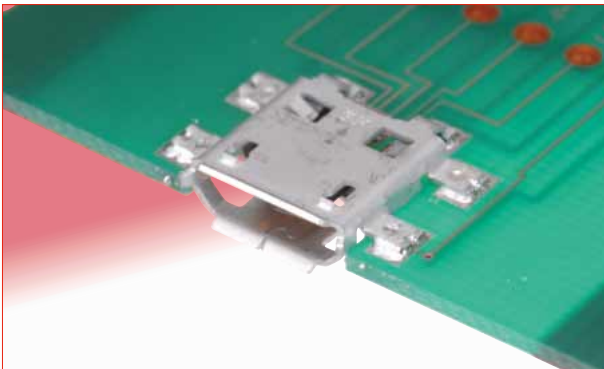
Part No.	HRS No.	Packaging
ZX62R-B-5P(30)	242-0028-8 30	2,000pcs/reel

◆ Recommended PCB mounting pattern

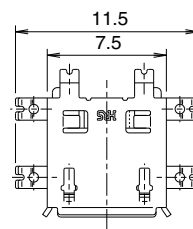


All dimensions : mm

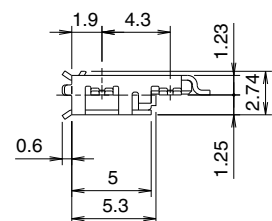
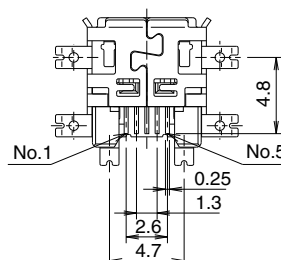
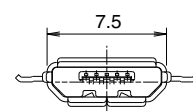
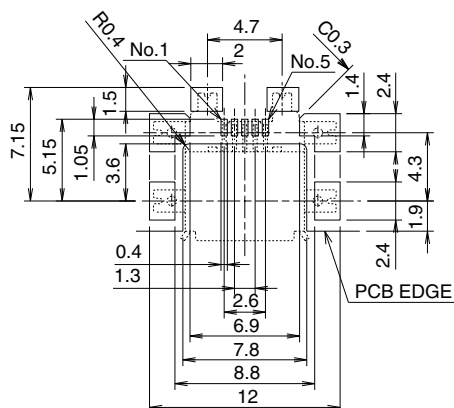
● Micro B - Drop-in (Mid-mount), Shell SMT



Part No.	HRS No.	Packaging
ZX62M-B-5P(30)	242-0024-7 30	1,500pcs/reel



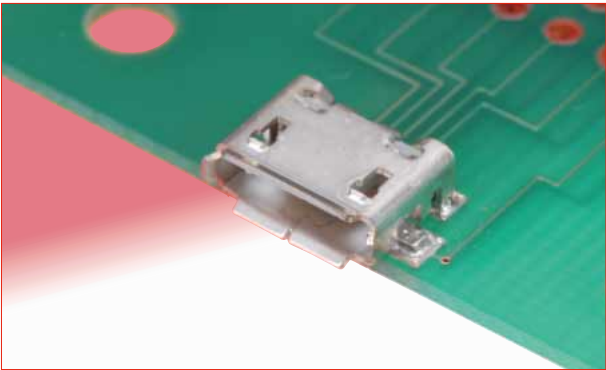
◆ Recommended PCB mounting pattern



All dimensions : mm

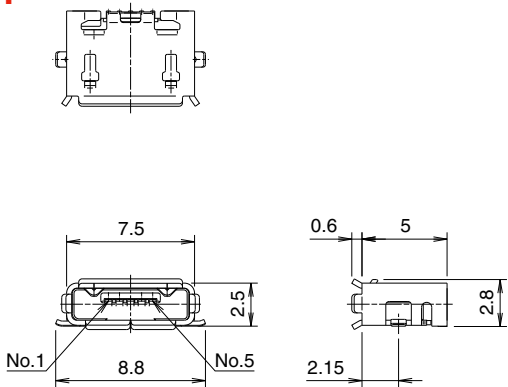
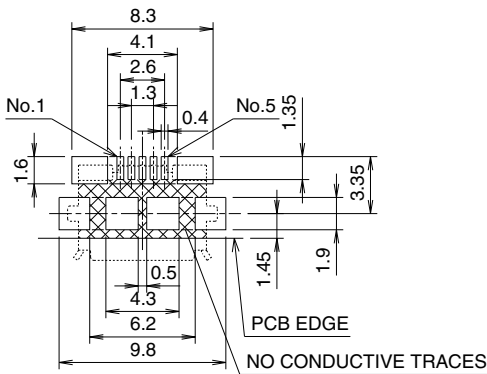
■Receptacles

●Micro AB - Standard (Bottom mount), Shell SMT



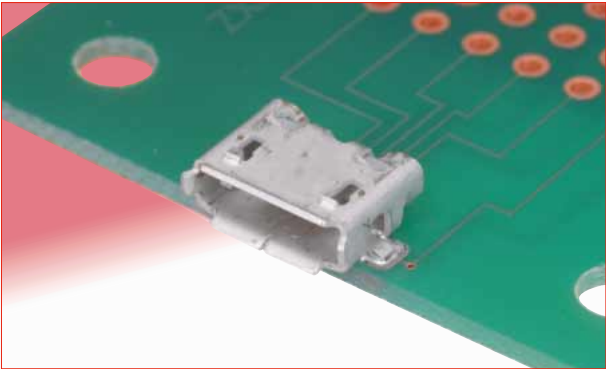
Part No.	HRS No.	Packaging
ZX62-AB-5PA(31)	242-0045-7 31	3,500pcs/reel

◆Recommended PCB mounting pattern



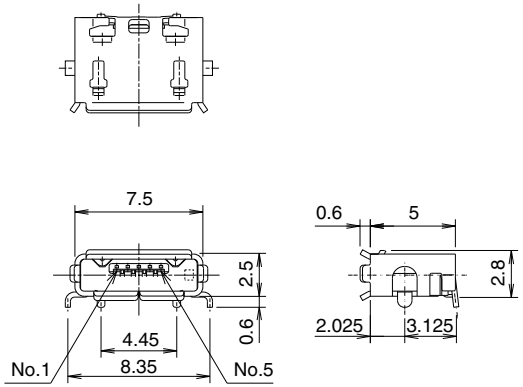
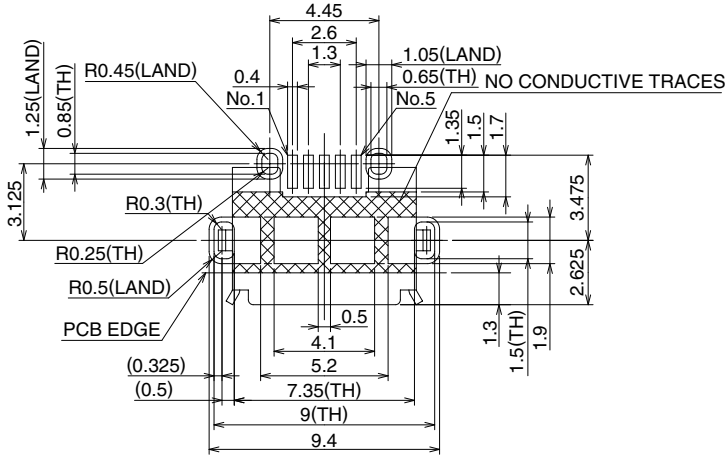
All dimensions : mm

●Micro AB - Standard (Bottom mount), Shell through hole



Part No.	HRS No.	Packaging
ZX62D-AB-5P8(30)	242-0027-5 30	2,000pcs/reel

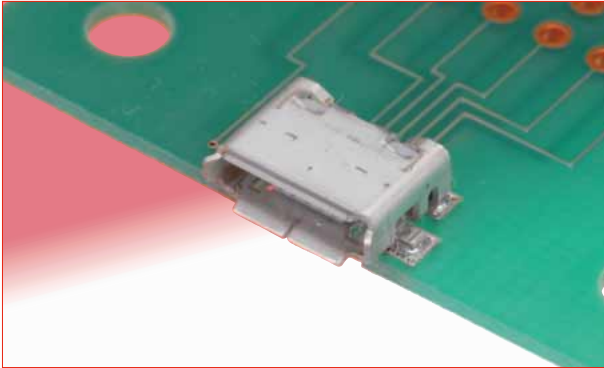
◆Recommended PCB mounting pattern



All dimensions : mm

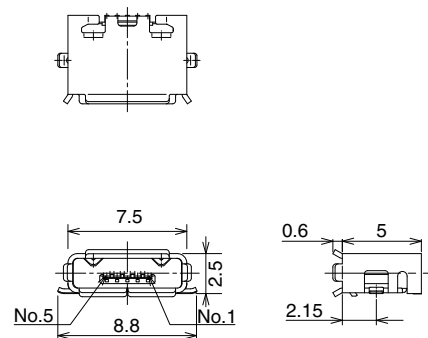
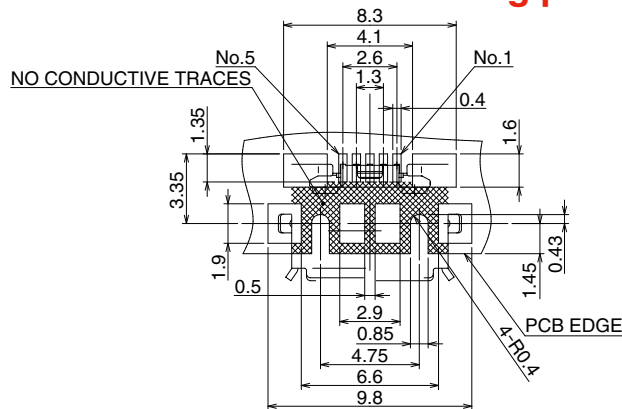
■ Receptacles

● Micro AB - Reverse (Top mount), Shell SMT



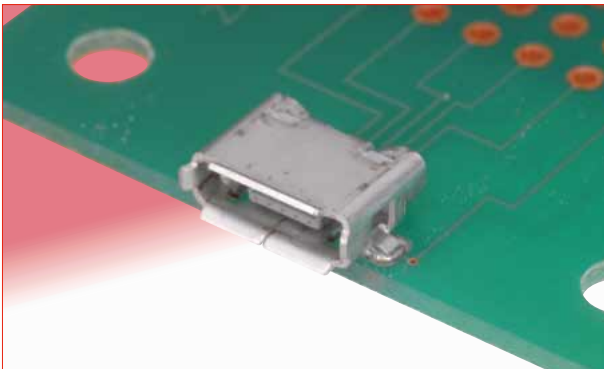
Part No.	HRS No.	Packaging
ZX62R-AB-5P(30)	242-0035-3 30	2,000pcs/reel

◆ Recommended PCB mounting pattern



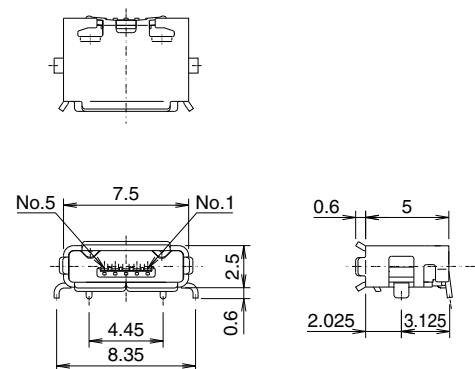
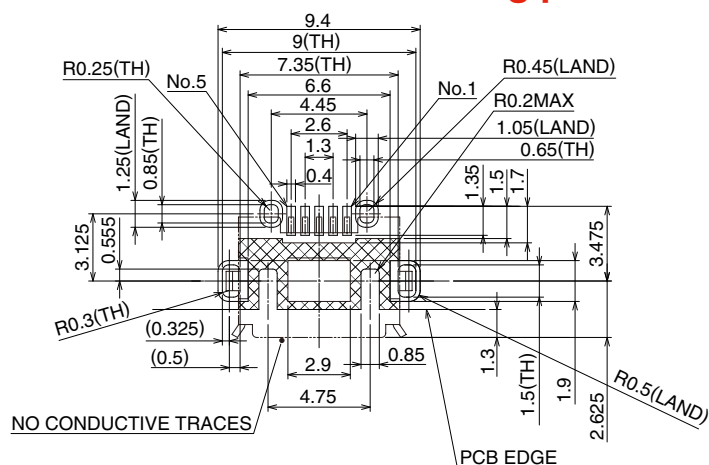
All dimensions : mm

● Micro AB - Reverse (Top mount), Shell through hole

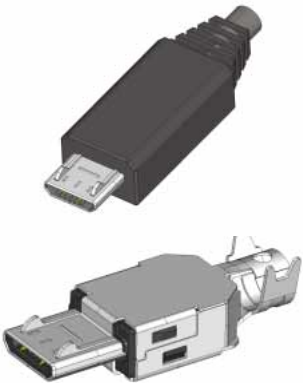
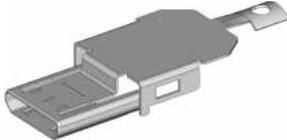
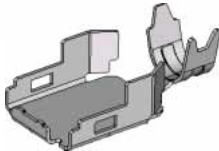
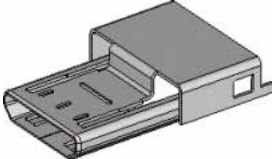
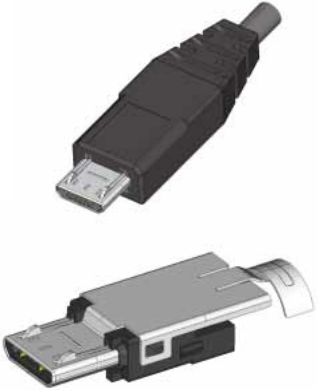
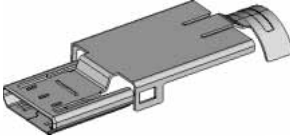
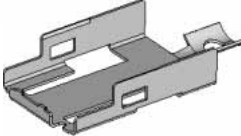


Part No.	HRS No.	Packaging
ZX62RD-AB-5P8(30)	242-0025-0 30	2,000pcs/reel

◆ Recommended PCB mounting pattern



All dimensions : mm

Plugs – assembled (not-terminated, without overmold)	Components
ZX40 - Direct wire soldering 	 ZX40-*SLDA Cover-top  ZX40-*5S-UNIT Assembly (insulator/ contacts/lock) *No PCB required  ZX40-SLDB Cover-bottom
ZX20 - PCB wire soldering 	 ZX20-*SLDC Cover  ZX20-*5S-UNIT Assembly (insulator/contacts/lock) *Vertical through hole PCB termination
ZX64 - PCB wire soldering 	 ZX64-*SLDA Cover-top  ZX64-*5S-UNIT Assembly (insulator/ contacts/lock) *Right angle through hole PCB termination  ZX64-SLDB Cover-bottom

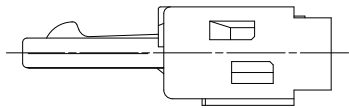
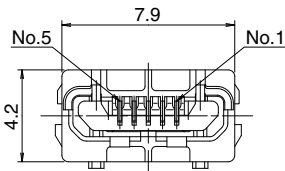
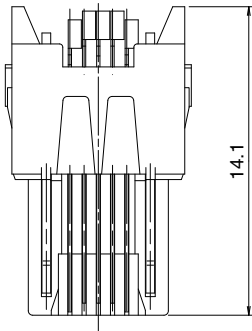
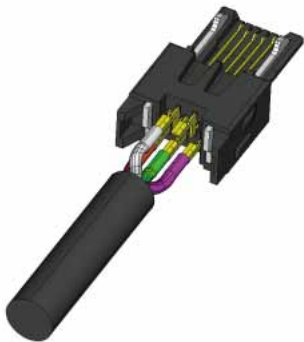
■Plugs

●Micro B - Assembly (insulator/contacts/lock) – Direct wire soldering



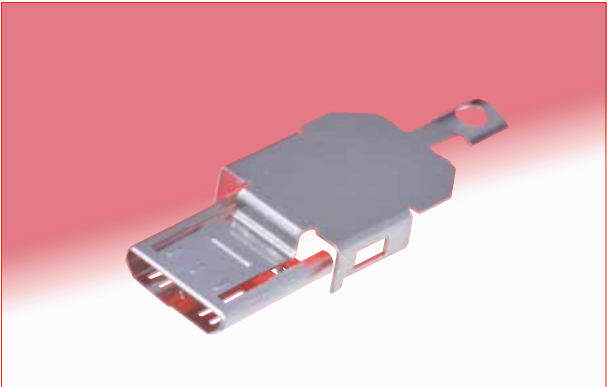
Part No.	HRS No.	Packaging
ZX40-B-5S-UNIT(31)	242-0002-4 31	1 piece

Contact HRS for Cable Termination Procedure Manual.

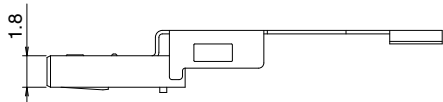
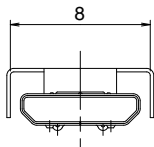
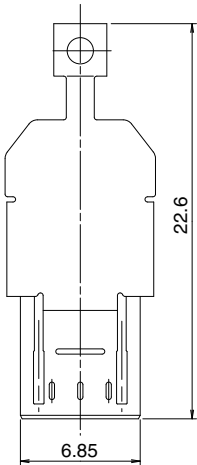


All dimensions : mm

●Micro B - Component, Cover-top - Direct wire soldering



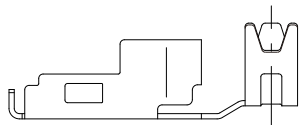
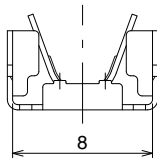
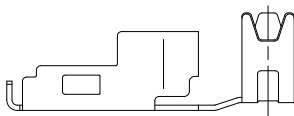
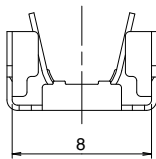
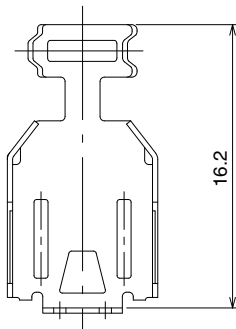
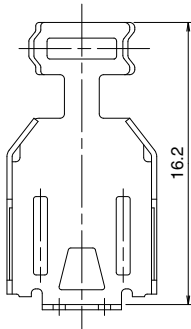
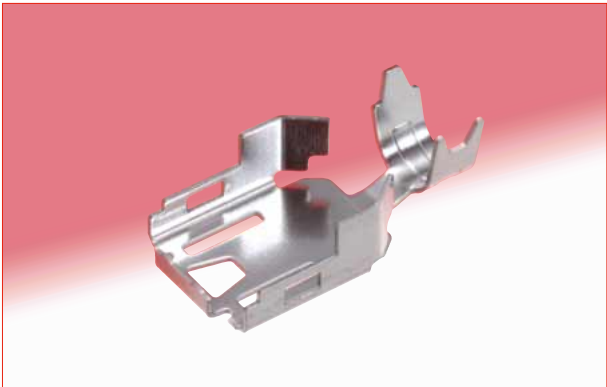
Part No.	HRS No.	Packaging
ZX40-B-SLDA	242-0003-7	4,000pcs/reel



All dimensions : mm

■Plugs

●Micro A, Micro B - Component, Cover-bottom - Direct wire soldering



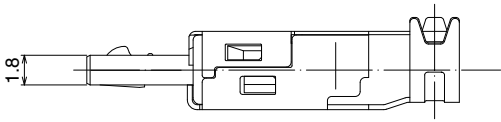
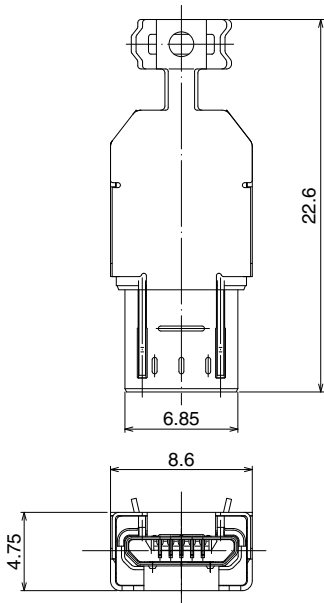
All dimensions : mm

ZX40-SLDB

ZX40-SLDB(3.3)

Part No.	HRS No.	Packaging	Cable dia.
ZX40-SLDB	242-0004-0	4,000pcs/reel	φ3.8
ZX40-SLDB(3.3)	242-0023-4		φ3.3

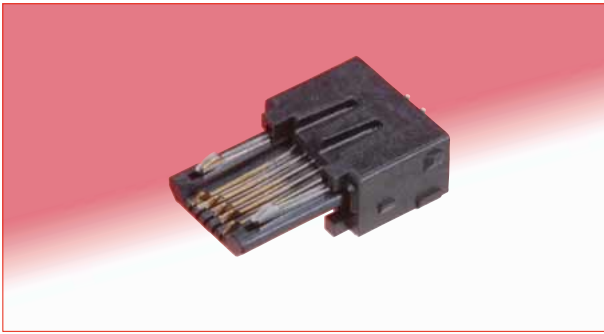
●Assembled



All dimensions : mm

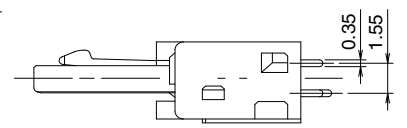
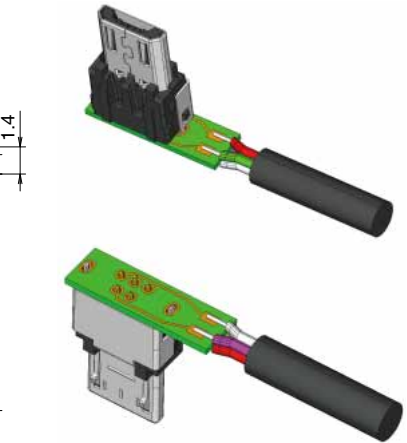
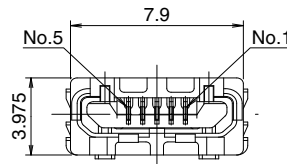
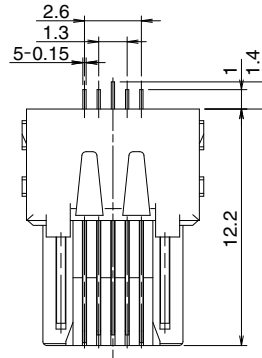
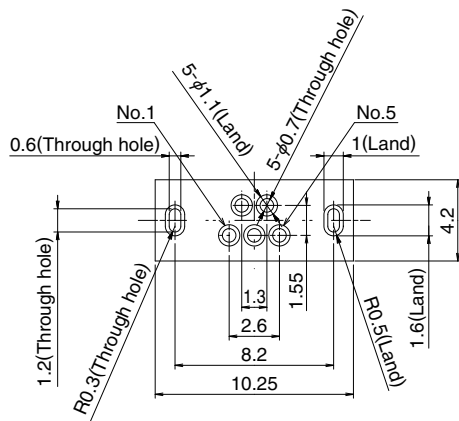
Plugs

●Micro B - Assembly (insulator/contacts/lock) - Vertical through hole PCB wire soldering (non-direct)



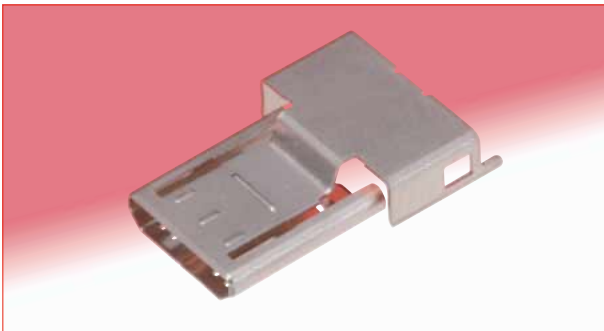
PCB mounting pattern

*PCB required (not supplied)
Max. thickness: 0.6mm

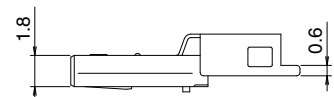
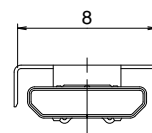
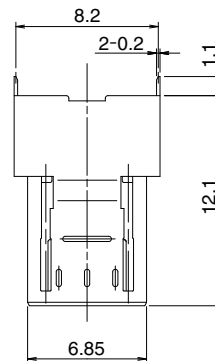


All dimensions : mm

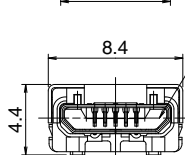
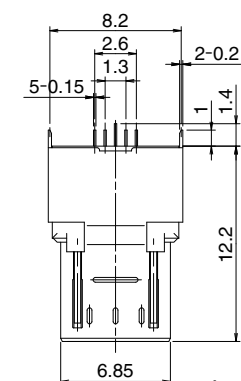
●Micro B - Component, Cover - through hole



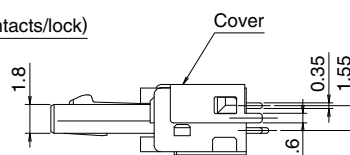
Part No.	HRS No.	Packaging
ZX20-B-SLDC	242-0022-1	4,000pcs/reel



●Assembled



Assembly
(insulator/contacts/lock)



Cover

All dimensions : mm

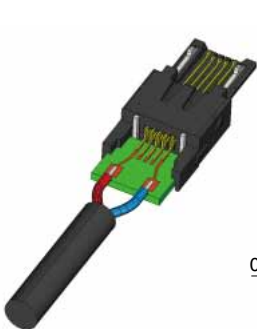
Plugs

●Micro B - Assembly (insulator/contacts/lock) - Right angle SMT

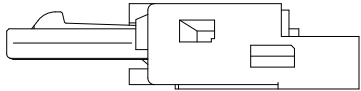
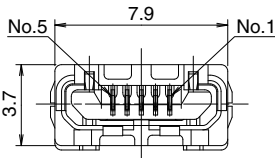
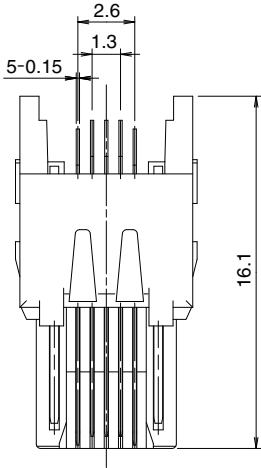
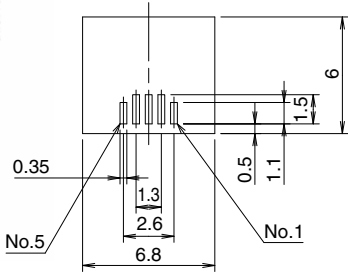


Part No.	HRS No.	Packaging
ZX64-B-5S-UNIT(31)	242-0009-3 31	1 piece

Contact HRS for Cable Termination Procedure Manual.

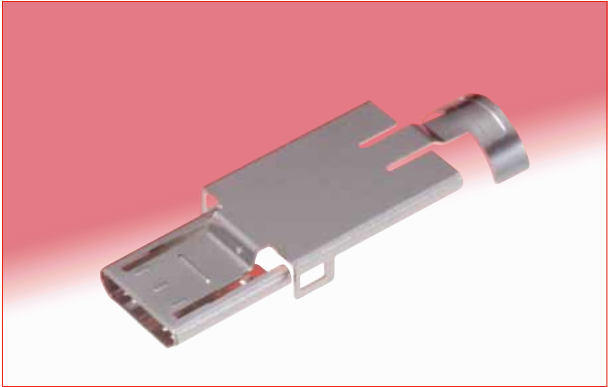


PCB mounting pattern
*PCB required (not supplied)
Max. thickness: 1.0mm

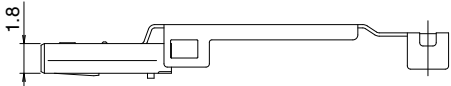
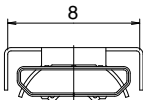
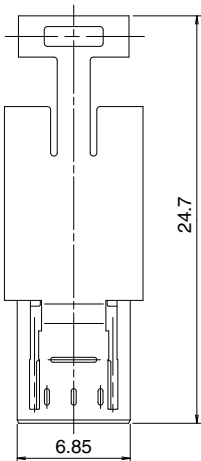


All dimensions : mm

●Micro B - Component, Cover-top – Right angle SMT



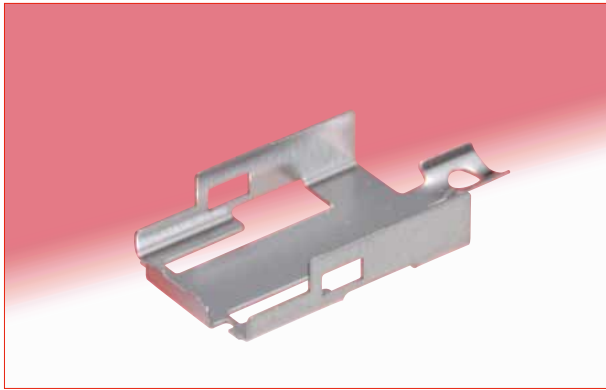
Part No.	HRS No.	Packaging
ZX64-B-SLDA	242-0013-0	4,000pcs/reel



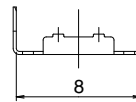
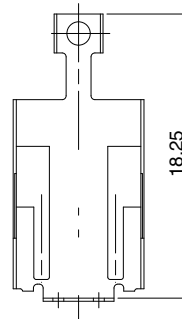
All dimensions : mm

■Plugs

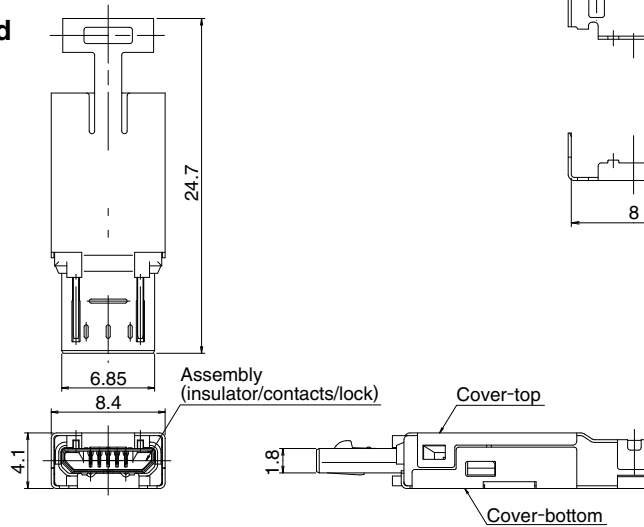
●Micro B - Component, Cover-bottom - Right angle SMT



Part No.	HRS No.	Packaging
ZX64-SLDB	242-0049-8	4,000pcs/reel



●Assembled

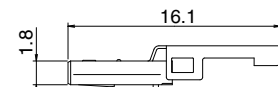
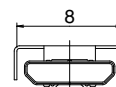
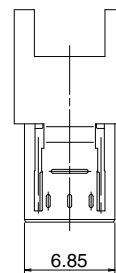


All dimensions : mm

●Micro B - Component, Shell/cover – Right angle SMT

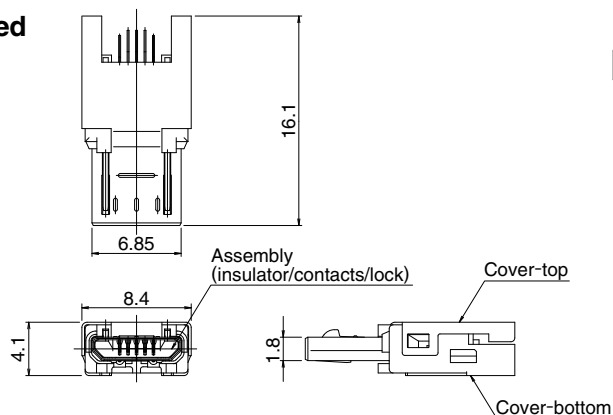


Part No.	HRS No.	Packaging
ZX64-B-SLDC	242-0018-4	4,000pcs/reel



Shell/cover, without cable clamp
This shell/cover does not require ZX64-SLDB.

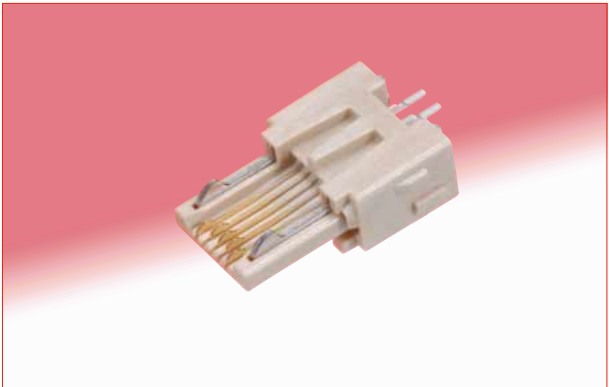
●Assembled



All dimensions : mm

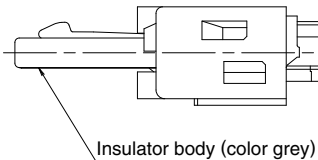
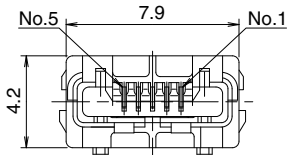
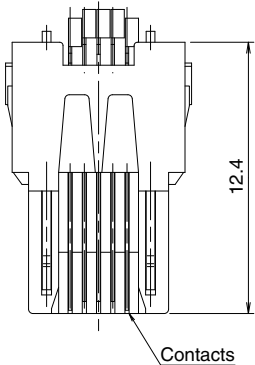
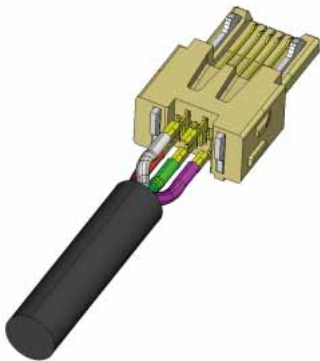
■Plugs

●Micro A - Assembly (insulator/contacts/lock) - Direct wire soldering



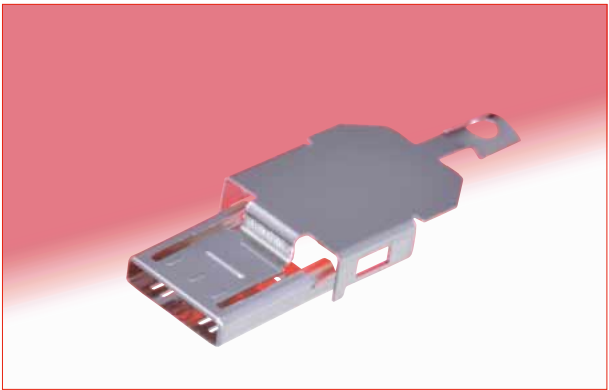
Part No.	HRS No.	Packaging
ZX40-A-5S-UNIT(30)	242-0010-2 30	1 piece

Contact HRS for Cable Termination Procedure Manual.

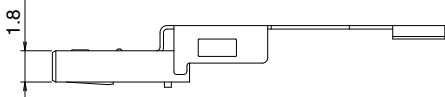
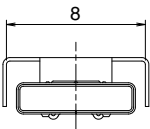
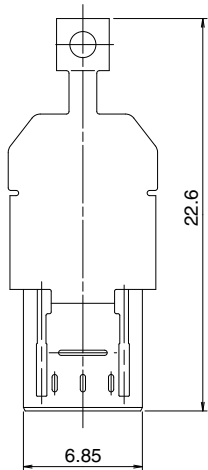


All dimensions : mm

●Micro A - Component, Cover-top - Direct wire soldering



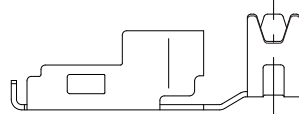
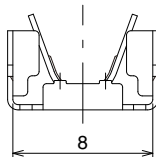
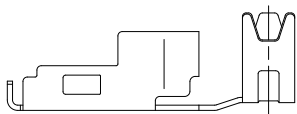
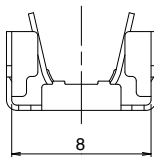
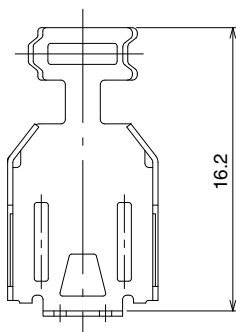
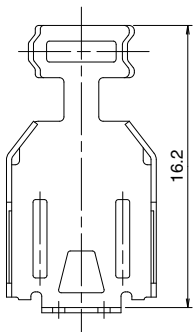
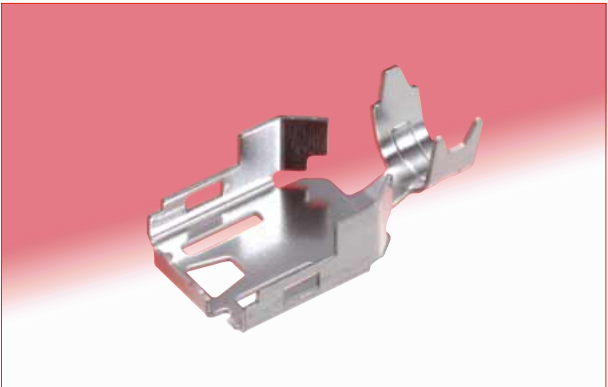
Part No.	HRS No.	Packaging
ZX40-A-SLDA	242-0011-5	4,000pcs/reel



All dimensions : mm

■Plugs

●Micro A, Micro B - Component, Cover-bottom - Direct wire soldering



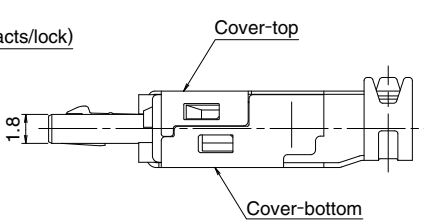
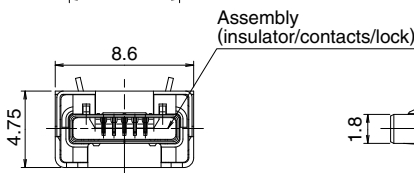
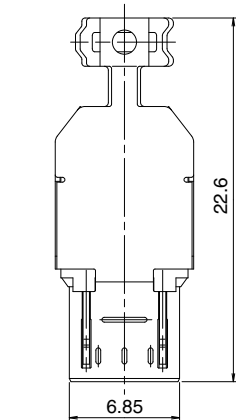
All dimensions : mm

ZX40-SLDB

ZX40-SLDB(3.3)

Part No.	HRS No.	Packaging	Cable dia.
ZX40-SLDB	242-0004-0	4,000pcs/reel	φ3.8
ZX40-SLDB(3.3)	242-0023-4		φ3.3

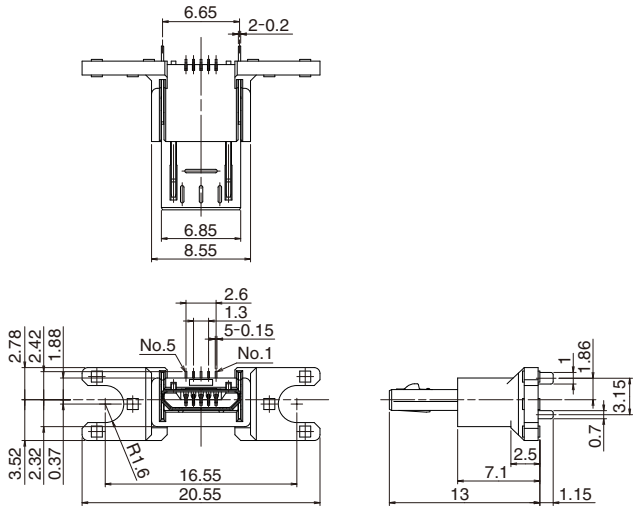
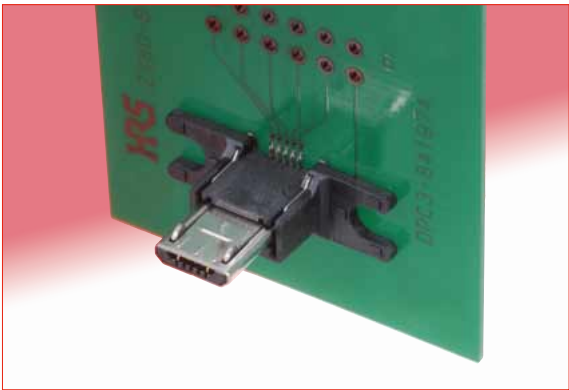
●Assembled



All dimensions : mm

■Plug-Vertical, cradle mount, Shell through hole

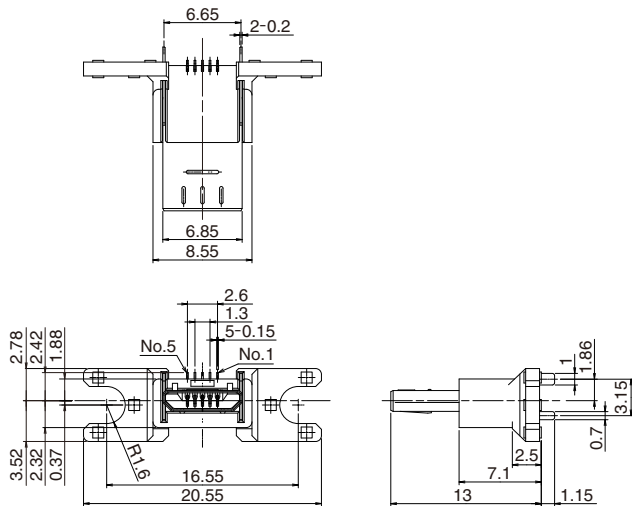
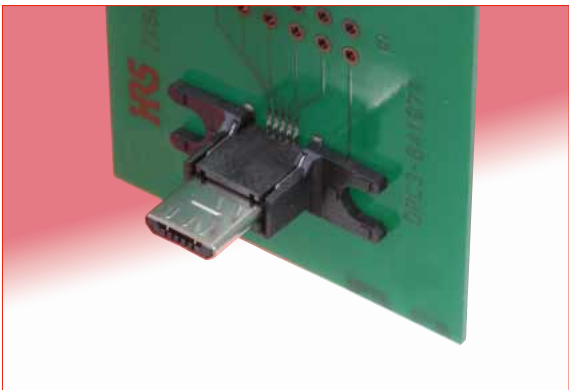
●Micro B, with lock



Part No.	HRS No.	Packaging
ZX80-B-5S(30)	242-0017-1 30	100pcs/pks

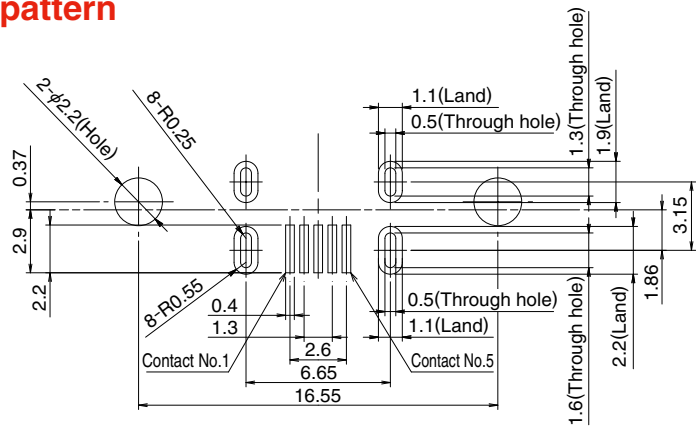
All dimensions : mm

●Micro B, without lock



Part No.	HRS No.	Packaging
ZX80-B-5SA(30)	242-0019-7 30	100pcs/pks

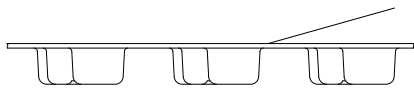
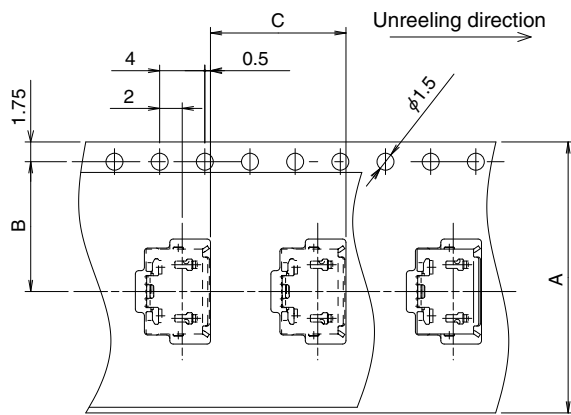
◆PCB mounting pattern



All dimensions : mm

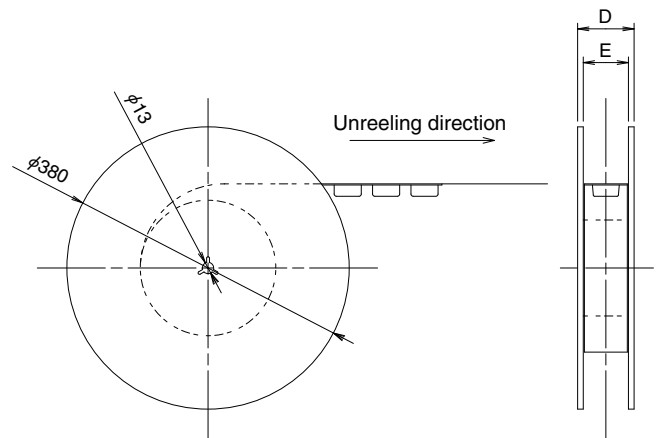
◆ Packaging Specifications

● Embossed carrier tape dimensions



Part No.	A dimension	B dimension
ZX62-B-5PA(33)	24	11.5
ZX62-AB-5PA(31)	24	11.5
ZX62M-B-5P(30)	24	11.5
Other	16	7.5

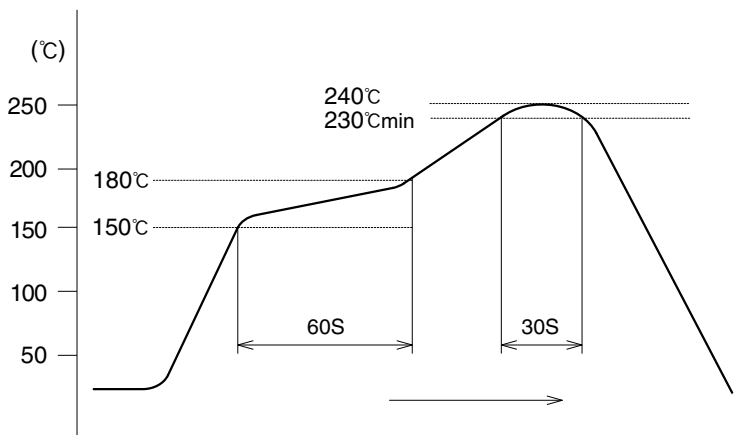
● Reel Dimensions



Part No.	D dimension	E dimension
ZX62-B-5PA(33)	30.4	24.4
ZX62-AB-5PA(31)	30.4	24.4
ZX62M-B-5P(30)	30.4	24.4
Other	22.4	16.4

◆ Recommended Temperature Profile - Receptacles

● Using lead-free solder paste



The temperature profile is based on the left conditions.

In individual applications the actual temperature may vary, depending on solder paste type, volume/thickness and board size/thickness. Contact your solder paste and equipment manufacturer for specific recommendations.

Note 1 : Up to 2 cycles of Reflow soldering are possible under the same conditions, provided that there is a return to normal temperature between the first and second cycle.

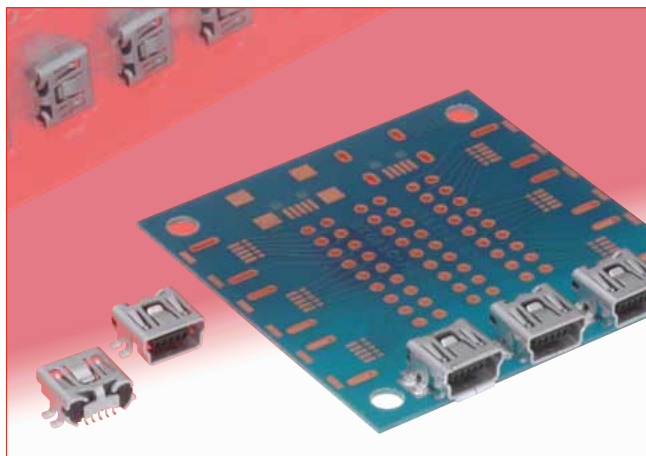
Note 2 : The temperature profile indicates the board surface temperature at the point of contacts with the connector terminals.

◆ Precautions

- Exercise care when handling the connectors. Do not subject them to excessive external forces when mating/un-mating.
- Mate and un-mate as intended, holding by the overmolded body, in the correct direction. Do not un-mate by pulling on the cable.
- Some tooling marks may be visible on the surfaces of receptacle (shell/cover). No form/fit or function is affected.
- Appearance of the surface finishes on the receptacles may vary between production runs. No affect on form, fit or function.

USB 2.0 Standard Connectors

UX Series



Meets requirements of USB 2.0 Standard
USB 2.0 certified



■ Features

1. Compatible to USB 2.0 Standard

The UX series connectors are certified by a certification organization specified by the USB Association.

The connectors are able to meet high-speed transmissions up to 480 Mbps, delivering optimal PC peripheral connections.

2. Low skew structure

An equal electrical length design between twisted pairs (contact numbers 2 and 3) for both the receptacles and the plugs provides for a theoretical zero skew. (Fig.1)

3. No heat-shrink tube needed

The wire termination section of the plug is fixed on the mold. In addition Hirose's unique metal shield structure allows the over-mold resin to easily flow into the wire termination section preventing short circuits from occurring even without using heat shrink tubing. This feature allows shortening of the length of untwisted part resulting in impedance unmatching at the wire termination sections.

4. Easy to handle plug

The plug is a snap lock type that gives a clear tactile click, assuring secure connector mating. The over-mold section also has a thin structure for space saving.

5. Metal shield for SMT or DIP mounting

Metal shields with either SMT or solder dip type are available to match the PCB design.

6. With or without positioning boss

Versions with or without positioning bosses can be selected to match the PCB design.

7. Suitable for automatic mounting

A heat resistant tape for vacuum pickup is applied to the receptacle allowing for the use of automatic mounting machines. Receptacles without tape are also available.

8. RoHS compliant

All materials and substances used to produce this product comply with RoHS standards.

Equal electrical length design(between twisted pairs)

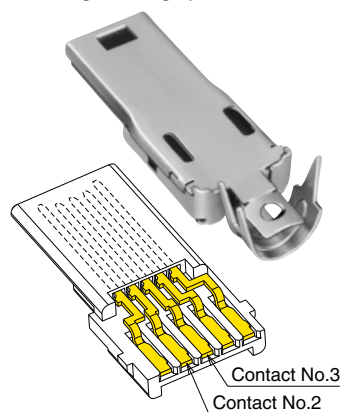


Fig.1

Ideal for the connection of personal computer peripherals

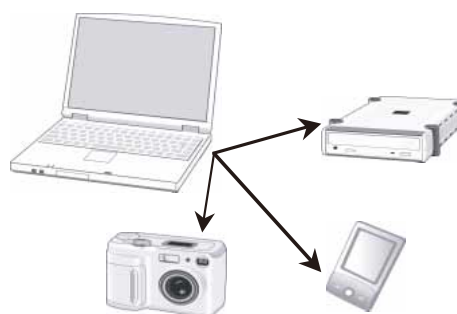


Fig.2

■Product Specifications

Ratings	Voltage rating	30V AC	Operating temperature range	-30 to +75°C (Note1)
	Current rating	1A		

Item	Specification	Conditions
1.Contact resistance	50mΩ max.	100mA
2.Insulation resistance	100MΩ min.	100V DC
3.Withstanding voltage	No flashover or insulation breakdown	100V AC / 1 minute
4.Capacitance	2pF max.	Measure between adjacent contacts at 1,000 ±10Hz
5.Total insertion/ withdrawal force	Insertion force : 35N max. Withdrawal force : 7N min.	Measure with an applicable connector.
6.Durability (mating/unmating)	With corresponding HRS connector. Contact resistance : 70mΩ max. Withdrawal force : 3N min.	5,000 cycles
7.Vibration	No electrical discontinuity of 1μs or longer No damage, cracks or parts dislocation.	Frequency 10 to 55Hz, single amplitude of 0.75mm, 2 hours in each of the 3 axial directions
8.Random vibration		Frequency 50 to 2,000Hz, 3 directions for 15 minutes each.
9.Shock		Acceleration of 490m/s ² , 11ms continuous time, sine half-wave, 3 cycles in each of the 6 directions
10.Heat Shock	Contact resistance : 70mΩ max.	Temperature : -55°C → +20°C to 35°C → +85°C → +20°C to 35°C Time : 30min. → 2 to 3 min. → 30 min. → 2 to 3 minutes 10 cycles
11.Temperature cycle	Insulation resistance : 10MΩ min. (when dry)	7 cycles (168 hours) at -10 to 65°C , humidity of 93 ± 3%
12.Salt spray	Contact resistance : 70mΩ max.	48 hours, 5% solution of salt water
13.Solderability	Wet state, solder coverage area 95% min.	Solder temperature 245°C, immersion time 2 to 3 seconds

Note 1 : The term "storage" refers to connectors stored for a long period of time prior to mounting and use.

■Materials / Finish

●Receptacle

Part	Material	Finish	Remarks
Insulator	Synthetic resin	Color : Black	UL94V-0
Contacts	Copper alloy	Contact area : Gold plated Lead area : Gold plated	———
Metal shield	Copper alloy	Tin alloy plated	———
Tape for vacuum pickup	Polyamide	———	———

●Plug

Part	Material	Finish	Remarks
Insulator	Synthetic resin	Color : Black	UL94V-0
Contacts	Copper alloy	Contact : Gold plated Wiring side : Tin alloy plated	———
Metal shield	Steel	Tin alloy plated	———
Over-mold (Note1)	PVC resin (Note2)	Color : Black (Note3)	———

Note 1 : Single over-molded plug is not available as over-mold is created when forming the connector together with harness assembly.

Note 2 : Halogen-free material is also available.

Note 3 : Various colors are available for over-molds and cables. Contact our sales department for details.

■Product Number Structure

Refer to the chart below when determining the product specifications from the product number.
Please select from the product numbers listed in this catalog when placing orders.

●Receptacle

UX 60S C - MB - 5 S T

① ② ③ ④ ⑤ ⑥ ⑦

●Plug

UX 40 A - MB - 5 P

① ② ⑧ ④ ⑤ ⑥

●Plug harness

UX 40 A - MB - 5 P A - 1000 - 1001

① ② ⑧ ④ ⑤ ⑥ ⑨ ⑩ ⑪

① Series name	UX series
② Contact termination style	60S : SMT type 40 : Solder termination type
③ Receptacle shape/type	C : Standard type
④ Connector type	MB : Type Mini B
⑤ Number of contacts	5 : 5 contacts
⑥ Contact gender	S : Female P : Male
⑦ Metal shield shape	T : SMT type 8 : Solder DIP type
⑧ Plug serial symbol	A : Type for thick cable
⑨ Type of connector on the opposite-side	A : Standard A
⑩ Cable length	1000 : 1000mm(Note 1)
⑪ Additional type number	

Note 1 : Optional cable lengths of up to 3000mm are available.
Contact our sales department for details.

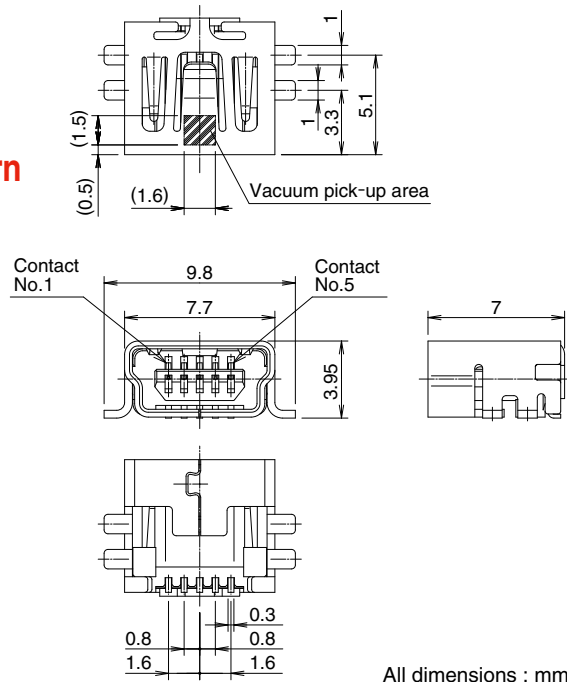
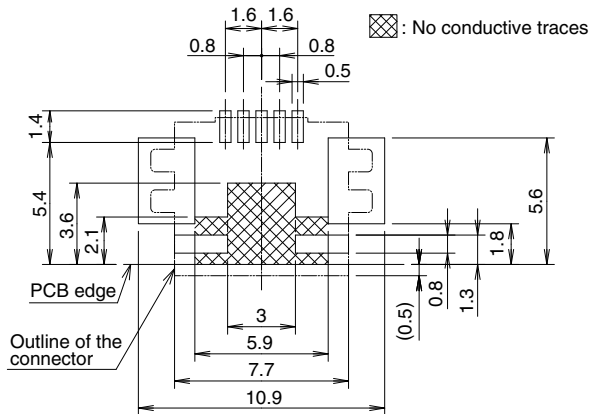
●Receptacle - Standard – Shell SMT



Part No.	HRS No.	RoHS
UX60SC-MB-5ST(80)	240-0016-6 80	

Note 1 : Tape and reel packaging (1,500pcs/reel).
Order by number of reels.

◆Recommended PCB mounting pattern



All dimensions : mm

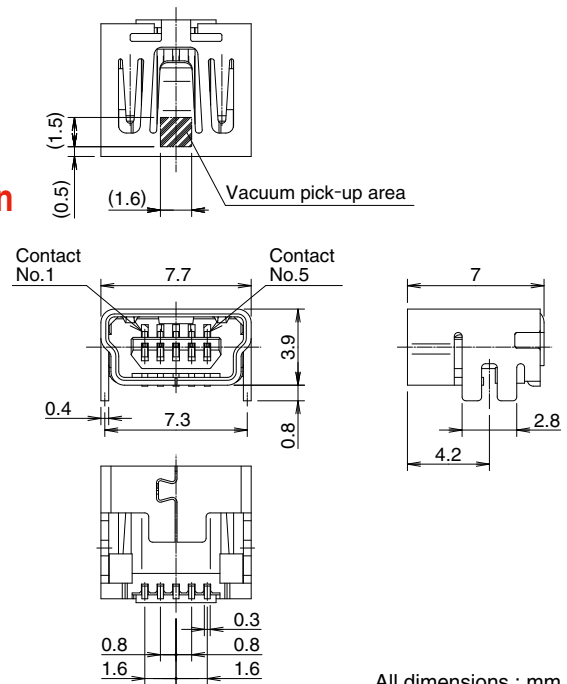
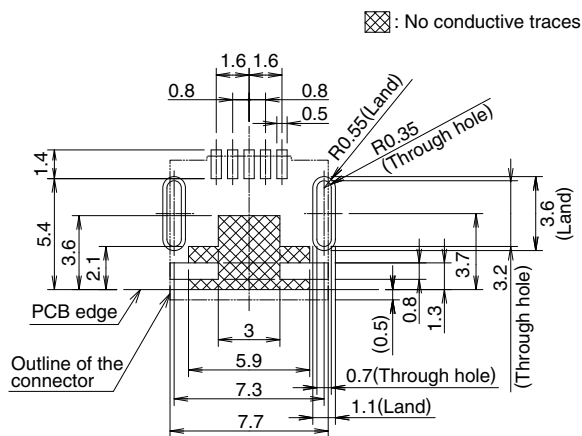
●Receptacle - Standard - Shell through Hole



Part No.	HRS No.	RoHS
UX60SC-MB-5S8(80)	240-0020-3 80	

Note 1 : Tape and reel packaging (1,000pcs/reel).
Order by number of reels.

◆Recommended PCB mounting pattern

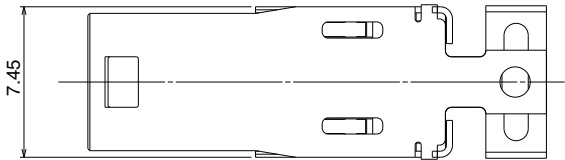


All dimensions : mm

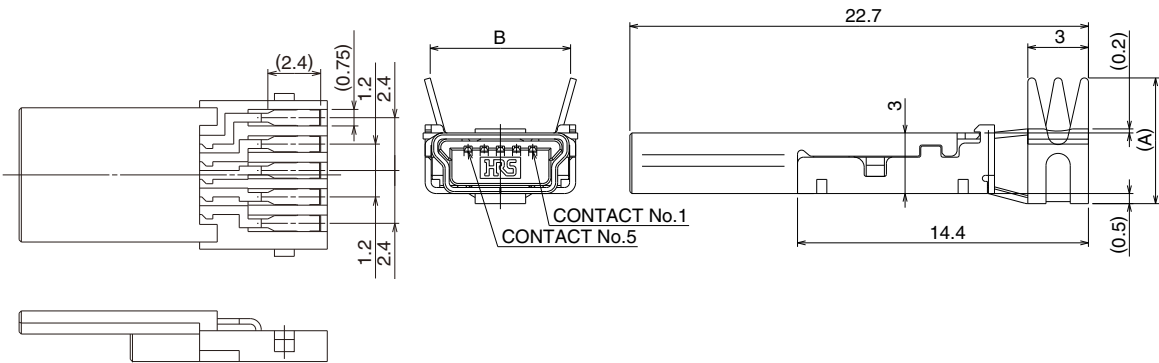
■Plug



●Assembled state



●Connector unit



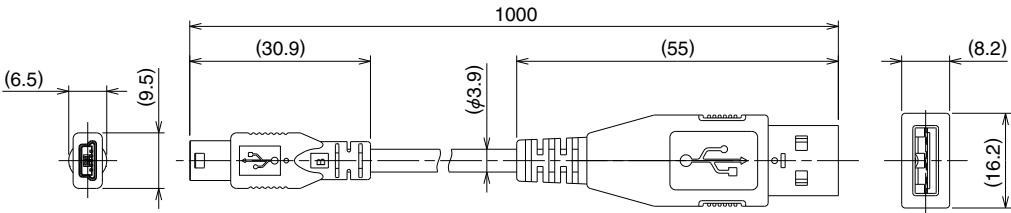
Part No.	HRS No.	Dimension A	Dimension B	Applicable cable(Note)	RoHS
UX40-MB-5P	240-0004-7	6.2	6.95	φ3.5~4.0	○
UX40A-MB-5P	240-0005-0	7.85	7.85	φ4.1~4.6	

(Note) The applicable cable diameters show approximate values (they may differ due to the insulation hardness).

■Plug Harness

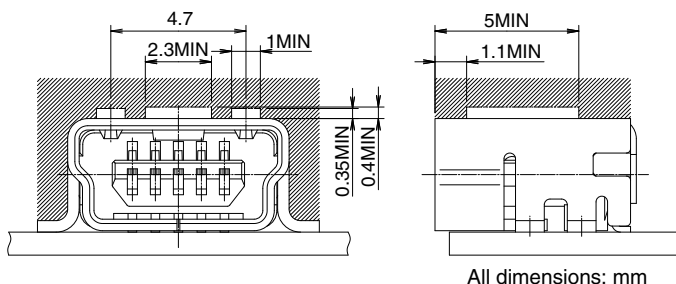


Part No.	HRS No.	RoHS
UX40-MB-5PA-1000-2003	240-2003-5	○



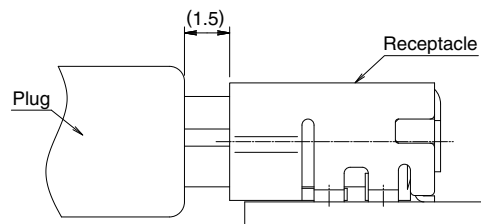
Recommended clearance areas

Dimensions shown in the illustrations below must be free of any materials or components, as this may interfere with the free movement of the ground contacts.



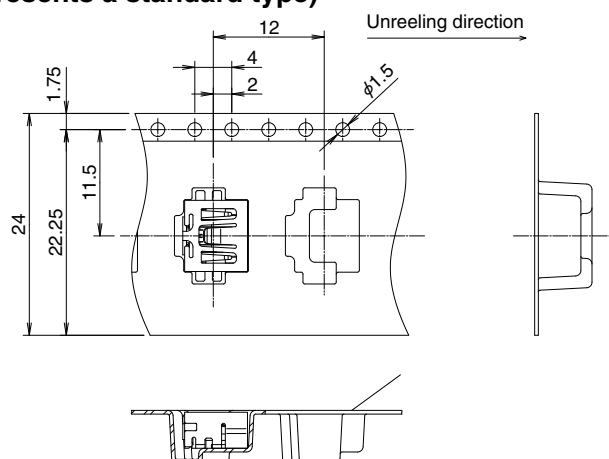
Mated Assembly – Receptacle

● Shown for Reference

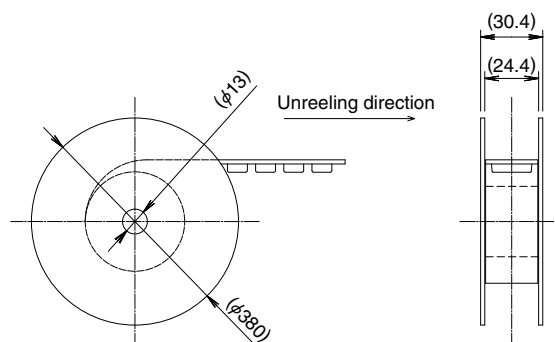


Packaging Specifications (JIS C 0806-3)

● Embossed carrier tape dimensions (The diagram represents a standard type)

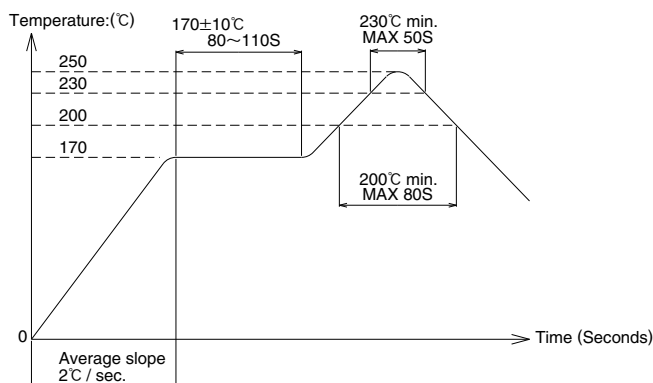


● Reel Dimensions



Recommended temperature profile

● Lead-free solder paste



The temperature profile is based on the shown conditions. In individual applications the temperature may vary, depending on solder paste type, volume/thickness and board size/thickness. Consult your solder paste and equipment manufacturer for specific recommendations.

W

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