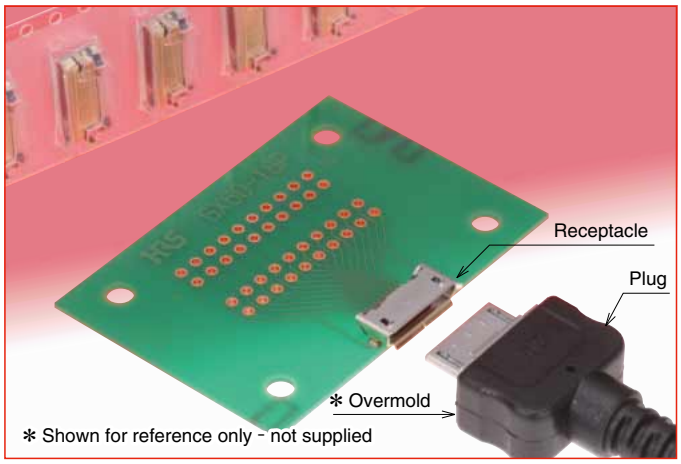
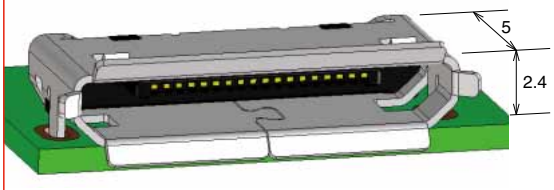
0.4 mm Pitch, Space-saving Interface Connectors

GX Series



* Shown for reference only - not supplied

Small size



(18 conductors)

Receptacle

GX60-18P

Fig.1

■Overview

Developed as input/output connectors for use in portable devices requiring reliable high durability connection.

■Features

1. Small size

With a width of 5 mm and 2.4 mm height above the mounting surface the connectors may be used in applications where board and volume space is restricted.(Fig.1)

2. Strong construction

Single piece shell increases the board retention and resists rotational forces encountered in demanding consumer environment

3. High durability

Unique lock latches will maintain high retention force (plug with corresponding receptacle) up to 10,000 cycles, confirming fully mated condition with a distinctive tactile “click” sensation.(Fig.2)

4. ESD protection

Increased distance from the edge of the metal shell to the front of the contacts offers circuit protection from electrostatic discharge.(Fig.3)

5. RoHS compliant

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

■Applications

DSC, PDA, notebook computers, mobile phones and other portable devices requiring high durability interface connectors.



Plug

GX40-18S

* Shown for reference only - not supplied.

Fig.2

ESD protection

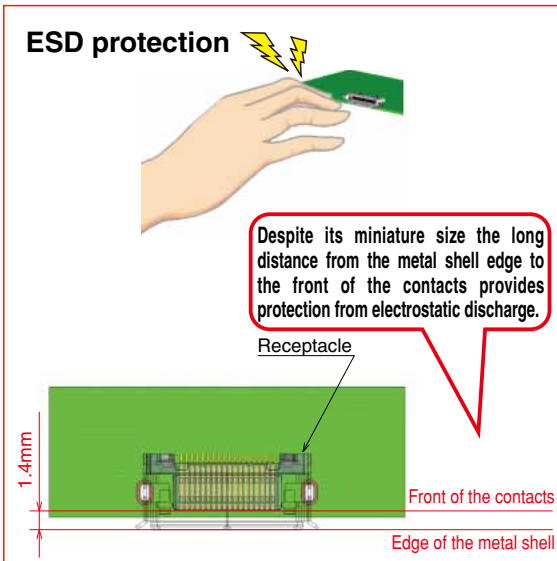


Fig.3

(Scheduled to be discontinued)

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■Specifications

Ratings	Current rating	0.5 A (1 A / contact, each contact at the end, 2 contacts only)	Operating temperature range	-30℃ to +80℃
	Voltage rating	30 V AC	Storage temperature range	-40℃ to +85℃

Item	Specification	Conditions
1. Contact resistance	60 mΩ max.	100 mA DC
2. Insulation resistance	100 MΩ min.	100 V DC
3. Withstanding voltage	No flashover or insulation breakdown	100 V AC / 1 minute
4. Durability	Contact resistance: 100 mΩ max. No damage cracks or parts dislocation.	10,000 cycles
5. Shock	No electrical discontinuity of 1 μs or longer. No damage, cracks or parts dislocation.	Acceleration of 490m/s^2, 11 ms duration, sine half-wave, 3 cycles, 3 axis
6. Vibration	No electrical discontinuity of 1 μs or longer. No damage, cracks or parts dislocation.	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 3 directions for 2 hours
7. Temperature cycle	Contact resistance: 100 mΩ max. No damage, cracks or parts dislocation.	Temperature:-55°C→+15℃ to 35℃→+85℃→+15℃ to 35℃ Time : 30min.→2min. to 3min.→30min.→2min. to 3 min. 5 cycles
8. Humidity	Insulation resistance: 100 mΩ min. Insulation resistance: 10 MΩ min.	96 hours at a 40 ±3℃, RH of 90 to 95%, then leave for 1 to 2 hours at normal temperature and humidity
9. Heat resistance	Contact resistance: 100 mΩ max.	96 ±4 hours at +85 ±2℃
10. Cold resistance	Contact resistance: 100 mΩ max.	96 ±4 hours at -40 ±3℃
11. Salt spray test	Contact resistance: 100 mΩ max.	48 hours at a concentration of 5% ±1%, and humidity of 85 ±3℃

■Materials

●Receptacle

Part	Material	Finish	Remarks
Insulator	Synthetic resin	Color: Black	UL94V-0
Contacts	Copper alloy	Gold plated	————
Shell	Stainless steel	Selective gold plated	————

●Plug

Part	Material	Finish	Remarks
Insulator	Synthetic resin	Color: Black	UL94V-0
Contacts	Copper alloy	Gold plated	————
Shells	Stainless steel	Nickel plated	————
Lock	Stainless steel	————	————

[Scheduled to be discontinued]

■Ordering information

●Receptacle

GX60 - 18 P
❶ ❷ ❸

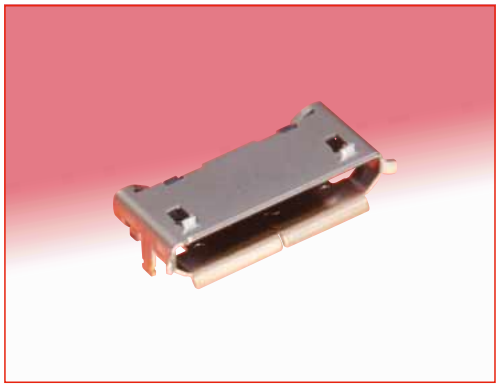
●Plug

GX40 - 18 S
❶ ❷ ❸

❶	Series name: GX60 (Receptacles) GX40 (Plugs)
❷	Number of contacts : 18
❸	Contacts type P: Male S: Female

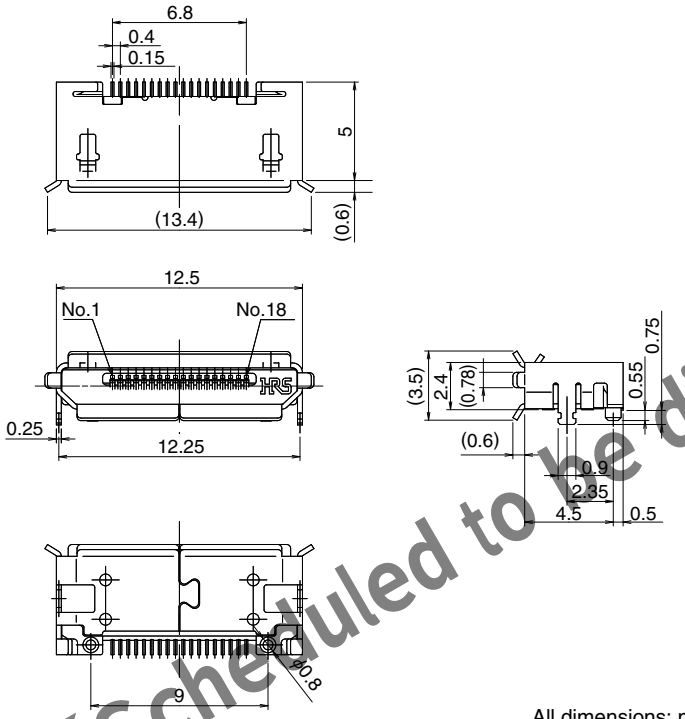
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■Receptacle



Part No.	HRS No.	Packaging	RoHS
GX60-18P	247-0001-3	1,500 pcs/reel	○

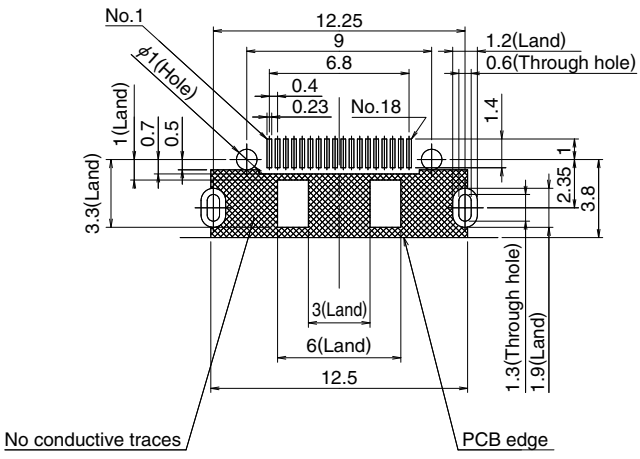
Note : Order by number of reels.



All dimensions: mm

【Scheduled to be discontinued】

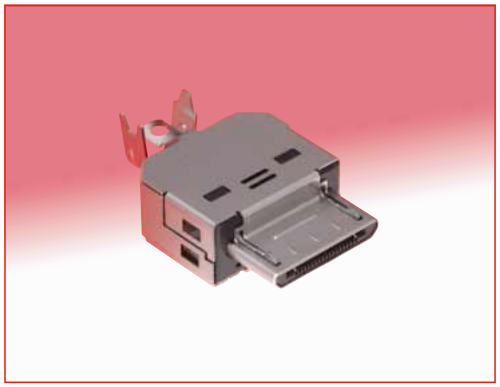
◆Recommended PCB mounting pattern



All dimensions: mm

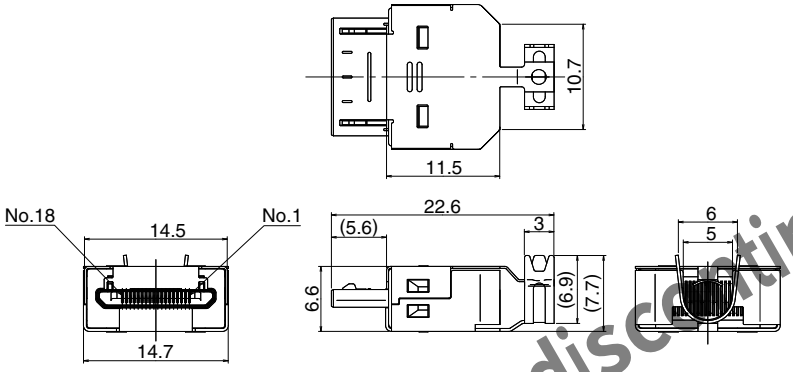
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■Plug



Part No.	HRS No.	Packaging	RoHS
GX40-18S	247-0002-6	1	○

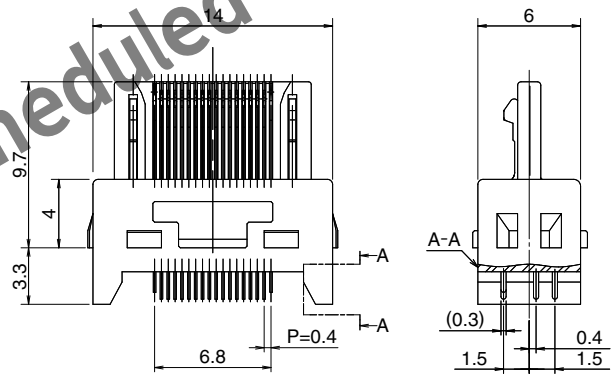
●Assembled components - Supplied non-terminated, without overmold



All dimensions: mm

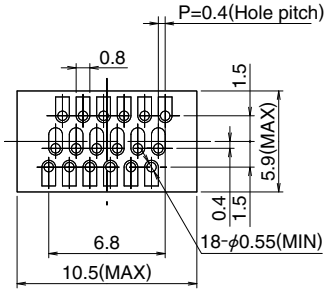
【Scheduled to be discontinued】

●Assembly (insulator/ contact/lock)

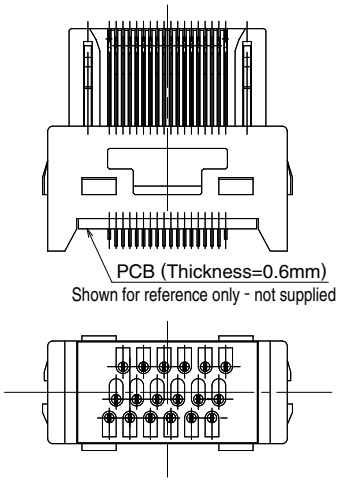


All dimensions: mm

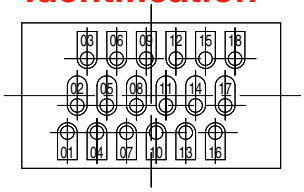
◆Recommended PCB mounting pattern (Thickness=0.6mm)



◆PCB installed



◆Contact Number Identification

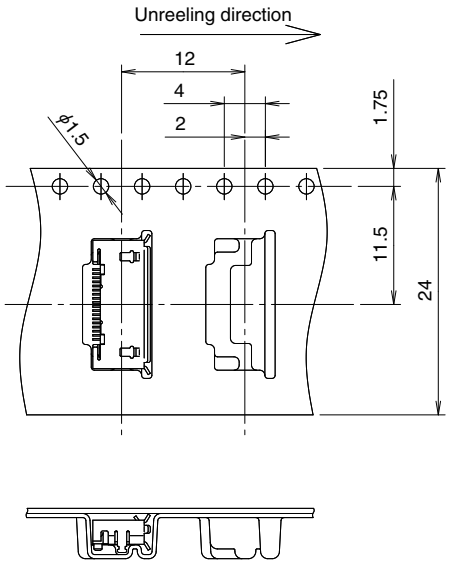


All dimensions: mm

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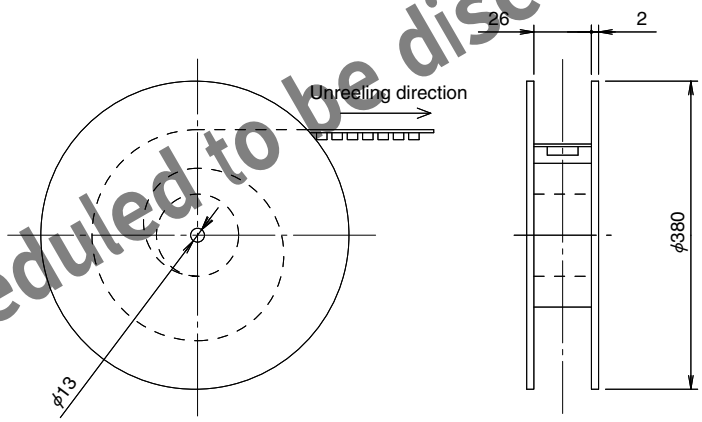
◆Packaging Specifications

●Embossed carrier tape dimensions



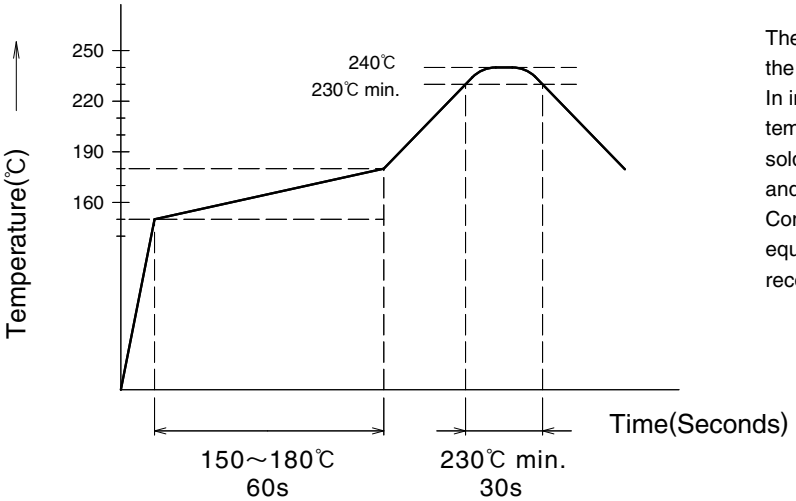
Note : Tape and reel packaging (1,500 pcs/reel).
Order by number of reels.

●Reel Dimensions



【Scheduled to be discontinued】

◆Recommended Solder Reflow Profile



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

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USA:
HIROSE ELECTRIC (U.S.A.), INC. Headquarters
2688 Westhills Court, Simi Valley, CA 93065-6235
Phone : +1-805-522-7958
Fax : +1-805-522-3217
http://www.hiroseusa.com

USA:
HIROSE ELECTRIC (U.S.A.), INC. San Jose Office
3255 Scott Boulevard, Building 7, Suite 101
Santa Clara, CA 95054
Phone : +1-408-253-9640
Fax : +1-408-253-9641
http://www.hiroseusa.com

USA:
HIROSE ELECTRIC (U.S.A.), INC. Detroit Office (Automotive)
37677 Professional Center Drive, Suite #100C
Livonia, MI 48154
Phone : +1-734-542-9963
Fax : +1-734-542-9964
http://www.hiroseusa.com

THE NETHERLANDS:
HIROSE ELECTRIC EUROPE B.V.
Hogehillweg #8 1101 CC Amsterdam Z-O
Phone : +31-20-6557460
Fax : +31-20-6557469
http://www.hiroseeurope.com

GERMANY:
HIROSE ELECTRIC EUROPE B.V. German Branch
Herzog-Carl-Strasse 4 D-73760 Ostfildern (Scharnhauser Park)
Phone : +49-711-4560-02-1
Fax : +49-711-4560-02-299
http://www.hirose.de

GERMANY:
HIROSE ELECTRIC EUROPE B.V. Nuernberg Office
Muggenhofer Str. 136 90429 Nuernberg
Phone : +49-911 32 68 89 63
Fax : +49-911 32 68 89 69
http://www.hirose.de

UNITED KINGDOM:
Hirose Electric Europe BV (UK Branch)
4 Newton Court, Kelvin Drive, Knowlhill, Milton Keynes, MK5 8NH
Phone : +44-1908 202050
Fax : +44-1908 202058

CHINA:
HIROSE ELECTRIC (SHANGHAI) CO., LTD.
1601, Henderson Metropolitan, NO.300, East Nanjing Road, Huangpu District, Shanghai, China 200001
Phone : +86-21-6391-3355
Fax : +86-21-6391-3335
http://www.hirose-china.com.cn

CHINA:
HIROSE ELECTRIC (SHANGHAI) CO.,LTD. BEIJING BRANCH
A1001, Ocean International Center, Building 56# East 4th Ring Middle Road, ChaoYang District, Beijing, 100025
Phone : +86-10-5165-9332
Fax : +86-10-5908-1381
http://www.hirose-china.com.cn

CHINA:
HIROSE ELECTRIC TECHNOLOGIES (SHENZHEN) CO., LTD.
Room 09-13, 19/F, Office Tower Shun Hing Square, Di Wang Commercial Centre, 5002 Shen Nan Dong Road, Shenzhen City, Guangdong Province, 518008
Phone : +86-755-8207-0851
Fax : +86-755-8207-0873
http://www.hirose-china.com.cn

HONG KONG:
HIROSE ELECTRIC HONGKONG TRADING CO., LTD.
Room 1001, West Wing, Tsim Sha Tsui Centre, 66 Mody Road, Tsim Sha Tsui East, Kowloon, Hong Kong
Phone : +852-2803-5338
Fax : +852-2591-6560
http://www.hirose-hongkong.com.hk

TAIWAN:
HIROSE ELECTRIC TAIWAN CO., LTD.
10388F, No.87, Zhengzhou Rd., Taipei
Phone : +886-2-2555-7377
Fax : +886-2-2555-7350
http://www.hirose-taiwan.com.tw

KOREA:
HIROSE KOREA CO., LTD.
1261-10, Jeoungwhang-Dong, Shihung-City, Kyunggi-Do 429-450
Phone : +82-31-496-7000,7124
Fax : +82-31-496-7100
http://www.hirose.co.kr

SINGAPORE:
HIROSE ELECTRIC SINGAPORE PTE. LTD.
10 Anson Road #26-1, International Plaza 079903, Singapore
Phone : +65-6324-6113
Fax : +65-6324-6123
http://www.hirose-singapore.com.sg

INDIA:
HIROSE ELECTRIC SINGAPORE PTE. LTD Delhi Liaison Office
Suite No. 606 5th Floor SB Tower 1A/1 Sector 16 A Filmcity Noida 201301 Uttar Pradesh-India
Phone : +91-120-4804917
Fax : +91-120-4804949
http://www.hirose.com/sg/

INDIA:
HIROSE ELECTRIC SINGAPORE PTE. LTD. Bangalore Liaison office
Unit No.03, Ground Floor, Explorer Building International Tech Park Whitefield Road, Bangalore 560066 Karnataka, India
Phone : +91-80-4120 1907
Fax : +91-80-4120 9908
http://www.hirose-singapore.com.sg

MALAYSIA:
HIROSE ELECTRIC SINGAPORE PTE. LTD (Representative office)
1-10-07, Suntech @ Penang Cybercity (1164),Lintang Mayang Pasir 3,11950, Bayan Baru, Penang, Malaysia.
Phone : +604-619-2564
Fax : +604-619-2574
http://www.hirose.com/sg/

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HIROSE ELECTRIC CO.,LTD.
2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN
TEL: +81-45-620-3526 Fax: +81-45-591-3726
http://www.hirose.com
http://www.hirose-connectors.com

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