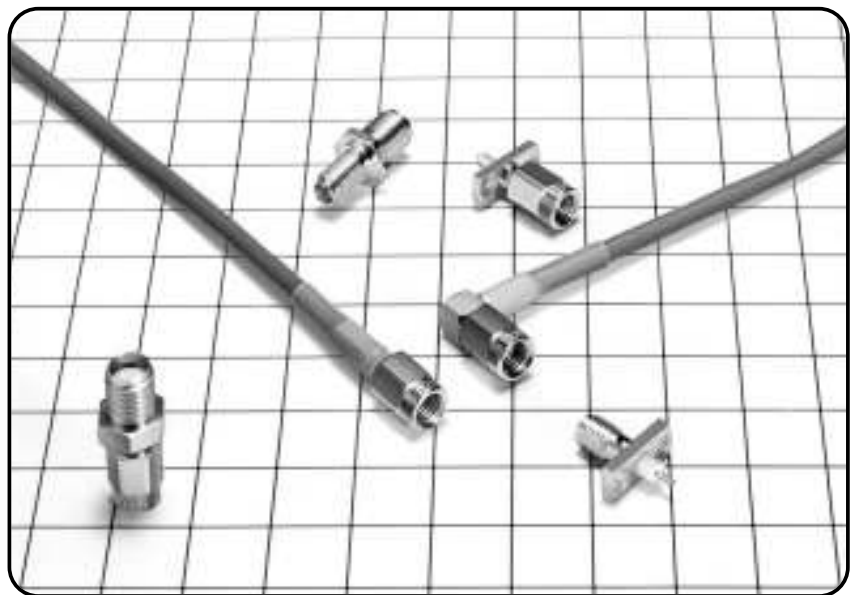
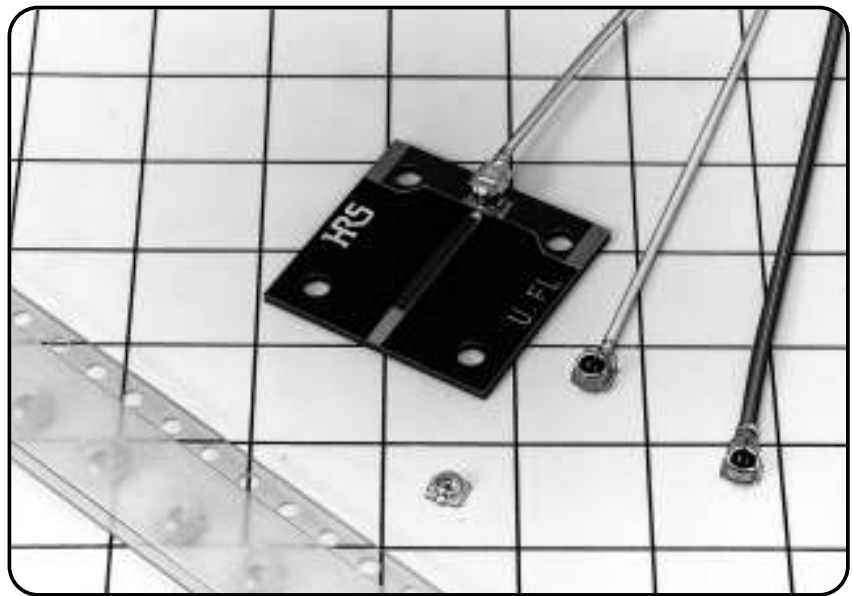


Coaxial Connectors



Coaxial Connectors



Miniature Stamping Coaxial Connectors

Mounting surface	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
1.4mm mated height, ultra small SMT connectors	50	DC to 3GHz	W.FL	53
1.9mm or 2.4mm mated height, ultra small SMT connectors		DC to 6GHz	U.FL	53
3.2mm mated height, ultra small SMT connectors		DC to 2GHz	E.FL	54
3.0mm mated height, ultra small SMT connectors		DC to 3GHz	H.FL	54
6.0mm mated height, SMT connectors		DC to 2.5GHz	S.FL	55
10.5mm mated height, SMT connectors		DC to 1.5GHz	FL	55

Standard Coaxial Connectors

Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
N	50	DC to 10GHz	N	56
M	-	DC to 200MHz	M	56
BNC	50	DC to 4GHz	BNC	57
TNC		DC to 3GHz	TNC	57
SMA		DC to 12.4GHz(to 18GHz)	HRM	58
Low-cost SMA		DC to 12.4GHz(to 18GHz)	HRM-VA	58
SSMA		DC to 12.4GHz	HRMM	59
C05		DC to 1GHz	UM	59

Subminiature Push-on type Coaxial Connectors

Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
Miniature push-on lock connectors (DC to 2GHz)	50	DC to 2GHz	MSS	60
Miniature push-on lock connectors (DC to 2GHz)		DC to 2GHz	PO6	60
Miniature push-on lock connectors (DC to 3GHz)		DC to 3GHz	POD1	61
Miniature push-on lock connectors (DC to 8GHz)		DC to 8GHz	POD	61
Miniature push-on lock connectors (DC to 12.4GHz)		DC to 12.4GHz	POB	62
MIL standard SMP compatible push-on lock connectors (DC to 18GHz)		DC to 18GHz	PO40G	62
Miniature push-on lock connectors (DC to 0.14GHz)	75	DC to 140MHz	MP	63
MIL standard SMP compatible push-on lock connectors (DC to 2GHz)		DC to 2GHz	PL71	63

Coaxial Connectors for Transmission equipments, communications equipments and satellite broadcasting equipments

Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
C15 type connectors for satellite TV reception system	75	DC to 1.5GHz	NF	64
Push-on connectors compliant to NTT specifications 4172 version 1		DC to 200MHz	3CV	64
Connectors compliant to IEC 169-13 1.6/5.6		DC to 500MHz	MRF1.6/5.6	65

Duplex Coaxial Connectors

Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
Connectors for computers and terminals	95	DC to 200MHz	TWT2	65

Conversion Connectors

Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
Conversion adapters	-	-	BWA	66

Backplane Coaxial Connectors

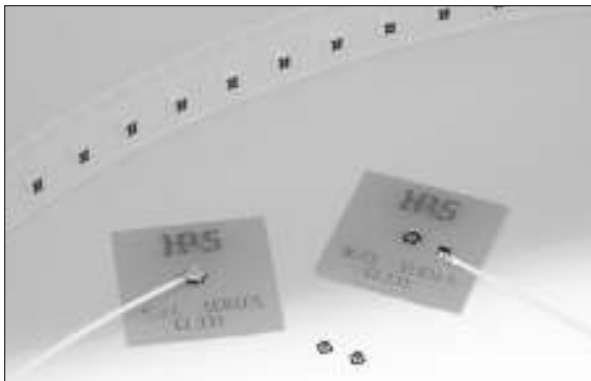
Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
2mm hard metric coaxial connectors 50 ohms type	50	DC to 3GHz	PO51M	66
2mm hard metric coaxial connectors 75 ohms type	75	DC to 2GHz	PO82M	67
2mm hard metric coaxial connectors (Housing case)	50,75	DC to 3GHz:50 DC to GHz:75	PO21M	67
Connectors for microwave digital system communications networks	75	DC to 1.5GHz	PO73	68
50 ohms, 75 ohms connectors compliant to DIN47297 standards	50,75	DC to 1GHz	PO51	68

Automotive Coaxial Connectors

Type	Characteristic Impedance (Ohms)	Frequency range	Series Name	Page
Automotive connectors compliant to USCAR standard	50,75	DC to 2GHz	GT5	69
Automotive connectors supporting 5.8GHz	50	DC to 6GHz	PO5G	69
Small automotive connectors	50	DC to 1GHz	GT13	70
Small automotive connectors supporting 6GHz	50	DC to 6GHz	GT16	70

1.4mm mated height, ultra small SMT connectors

W.FL Series



Features

- Mated height: 1.4mm (1.55mm max).
- PCB occupied area: 3.4 sq.mm.
- World's lightest weight: Receptacle: 5.6mg, Right angle plug: 18.6mg.
- High frequency performance up to 6GHz. V.S.W.R.: 1.3 max, from DC to 3GHz.
- Easy plug extraction by extraction tool.

Applications

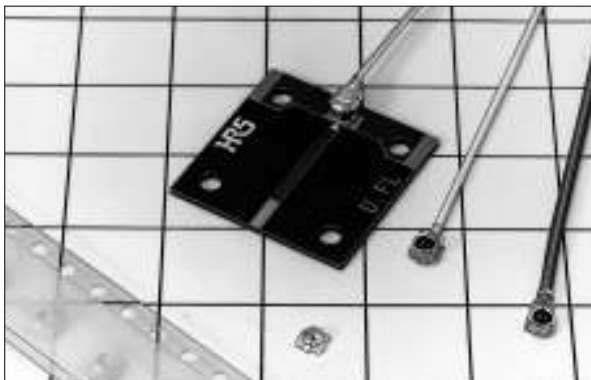
Mobile phone, Radio communication equipment, Measurement equipment, PDA, GPS, Wireless LAN, Bluetooth

Specifications

Item	Requirements
PCB Mount Type	SMT
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 3(GHZ)
Operating Temperature Range (°C)	-40 to 90
Insulator	PBT (UL94V-0, Color: Black), LCP (UL94V-0, Color: Black)
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Accessories	Receptacle for check
Remarks	Extraction tool, conversion adaptor

1.9mm or 2.4mm mated height, ultra small SMT connectors

U.FL Series



Features

- Mating height of 2.4 mm (2.5 mm max) or below.
- PCB occupation area of 7.7 sq.mm.
- Coaxial connector in the world's lightest class. Receptacle: 15.7mg. Right angle plug: 59.1mg.
- High frequency performance up to 6 GHz. V.S.W.R. is 1.3 or less from DC up to 3GHz.
- Tactile lock feeling ensures engagement even with this small size.

Applications

Mobile Phones, Radio communications equipment, Measurement instruments, GPS, Wireless LAN, Bluetooth

Specifications

Item	Requirements
PCB Mount Type	SMT
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 6(GHZ)
Operating Temperature Range (°C)	-40 to 90
Insulator	PBT (UL94V-0, Color: Black), LCP (UL94V-0, Color: Beige)
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Accessories	Receptacle for check
Remarks	Extraction tool, conversion adaptor

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

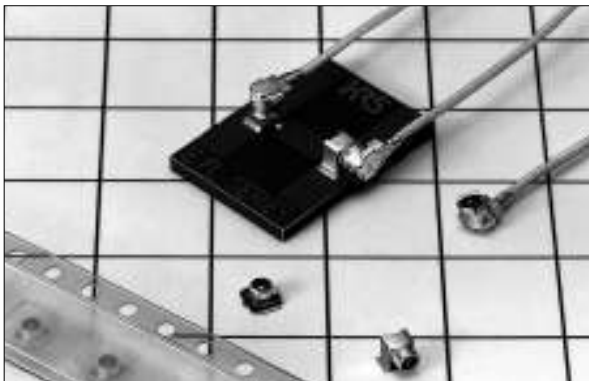
FPIC/FPIC Connectors

Optical Connectors and Devices

Microwave Components

3.2mm mated height, ultra small SMT connectors

E.FL Series



Features

- Mating height: straight receptacle is 3.2 mm or below, and right angle receptacle is 3.6 mm or below.
- Providing a locking feeling at the time of mating.
- The footprint is 9.4sq.mm on the receptacle side.
- V.S.W.R. is 1.3 or less from DC up to 2GHz.

Applications

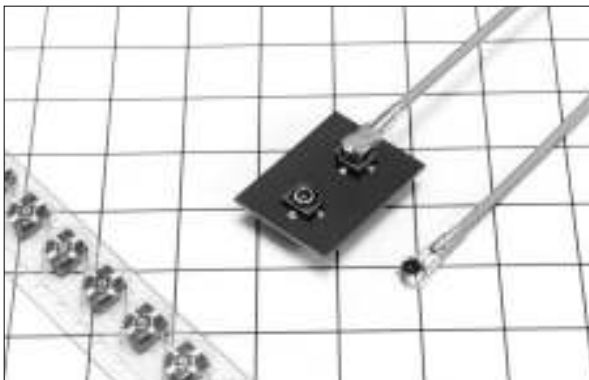
Mobile Phones, Radio communications equipment, Measurement equipment, GPS

Specifications

Item	Requirements
PCB Mount Type	SMT
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 2(GHZ)
Operating Temperature Range (°C)	-40 to 90
Insulator	PBT (UL94V-0, Color: Black), LCP (UL94V-0, Color: Black)
Applicable Cable (mm)	RF-MF5010(Nissei Electric Co., Ltd.),CO-6F-SB-CX50(Hitachi Cable, Ltd.),F12B0074-B(Junkosha Co., Ltd.),0.4DS-PBA(Sumitomo Electric Industries, Ltd.)
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Accessories	Receptacle for check
Remarks	Extraction tool, conversion adaptor

3.0mm mated height, ultra small SMT connectors

H.FL Series



Features

- Mating height of 3 mm or below.
- Uses solderless crimping for both center conductors and outer conductors.
- Connection can be easily verified by locking feeling. Scoop-proof mechanism protects against mis-insertion.
- Models for 75 ohm cable is available.
- V.S.W.R. is 1.3 or less from DC up to 3GHz.

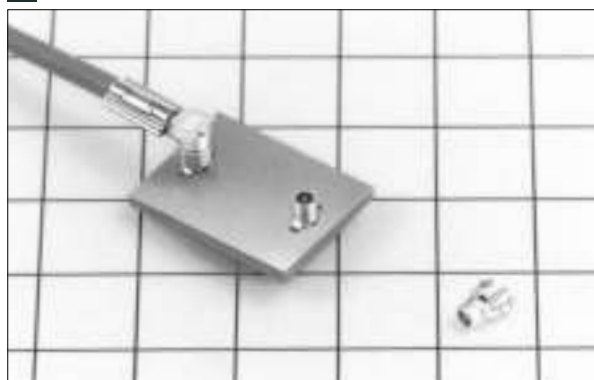
Applications

Mobile Phones, Radio communications equipment, Measurement equipment, GPS

Specifications

Item	Requirements
PCB Mount Type	SMT
Contact Plating	Gold
Characteristic Impedance (ohms)	50,75
Frequency Range	0 to 3(GHz):50ohms
Insulator	PBT (Color: Black), LCP (Color: Black)
Applicable Cable (mm)	CO-6F-H-SB(Hitachi Cable, Ltd.),DFS111-UL1979(Junkosha Co., Ltd.),0.8DS-PBE(Sumitomo Electric Industries, Ltd.),A12B0733(Junkosha Co., Ltd.),1.25C-6FFH(Hitachi Cable, Ltd.)
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp
Accessories	Receptacle for check
Remarks	Extraction tool, conversion adaptor

Circular Connectors
Rectangular Connectors
Coaxial Connectors
Memory Card
Modular Connectors
Card Edge Connectors
Board-to-Board Connectors
Board-to-Wire Connectors
FPC/FFC Connectors
Optical Connectors and Devices
Microwave Components

6.0mm mated height, SMT connectors**S.FL Series****Features**

- Mating height of 6 mm or below.
- Suitable to 0.8D-QEW/CW cable.
- V.S.W.R. is 1.25 or less from DC up to 2.5GHz.

Applications

Radio communications equipment, Measurement equipment

Specifications

Item	Requirements
PCB Mount Type	Through hole
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 2.5(GHZ)
Insulator	Polyphenylene oxide, polyethylene terephthalate
Applicable Cable (mm)	0.8D-QEW-CW
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp
Remarks	Extraction tool, conversion adaptor (BWA series)

10.5mm mated height, SMT connectors**FL Series****Features**

- Mating height: 10.5mm or below. Maximum outside diameter: 5mm.
- Uses solderless crimping for both center conductors and outer conductors.
- Matching 1.5D-QEW and 1.5C-QEW/CW cables.
- V.S.W.R. is 1.2 or less from DC up to 1GHz.
- Combined axial forces and simple lock provide high reliability.

Applications

Radio communications equipment, Measurement equipment, Control equipment

Specifications

Item	Requirements
PCB Mount Type	Through hole
Contact Plating	Gold
Characteristic Impedance (ohms)	50,75
Frequency Range	0 to 1(GHZ):50ohms
Insulator	PBT (Color: Black)
Applicable Cable (mm)	1.5D-QEW, 1.5C-QEW-CW
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp
Accessories	Receptacle for check
Remarks	Connection tool, extraction tool, conversion adaptor (BWA series)

N Series



Features

- Medium-sized, weather-resistant, constant-impedance standard coaxial connectors of screw-coupling type, suited for medium-sized coaxial cables.
- Suited primarily for coaxial cables RG-5/U, RG-6/U, RG-8/U, and RG-9/U.
- Conforms to MIL-C-39012, Defense Agency DSP C 6201, and JIS standards.

Applications

Communications equipment, Measurement equipment

Specifications

Item	Requirements
Generic Name	N
Contact Plating	Gold, silver
Characteristic Impedance (ohms)	50
Frequency Range	0 to 10(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	RG-5,6,8,9,14,21,58/U,3D-2V,3D-XW Irrax cable,5D-2V,8D-2V,5D-2W,5D-FB,10D-FB
Center Conductor Plating	Gold,Silver
Outer Conductor Plating	Silver, nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Clamp, solder
Industry Standard	DSP,JIS,MIL
Accessories	Cap
Remarks	Conversion adaptor (BWA series)

M Series



Features

- Popular and low-cost coaxial connectors that have been used much longer than other coaxial connectors in Japan.
- Medium size, screw lock type items for thin and medium-size electrical cable are the most popular connectors having no-rated impedance.
- Having no weather-resistance capability, these connectors cannot be used in humid environment without suitable protection against moisture.
- Maximum rated voltage is 500V (crest value) with no impedance matching. Therefore, up to 200MHz will be a reasonable service range.
- Recommended coaxial cables are 3C-2V, 5C-2V, and 7C-2V.

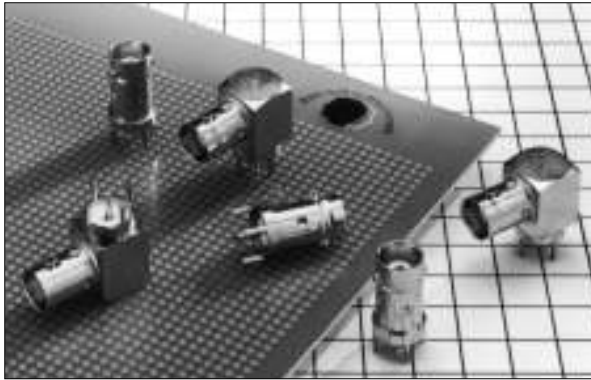
Applications

Automobile communications equipment, Ham radio equipment

Specifications

Item	Requirements
Generic Name	M
Contact Plating	Silver
Frequency Range	0 to 0.2(GHZ)
Insulator	Tetrafluoride, phenol
Applicable Cable (mm)	RG-5,6,8,11,14,15,55,58/U,3C-2V,3D-2V,5C-2V,5D-2V,7C-2V,10C-2V,10D-2V
Center Conductor Plating	Silver
Outer Conductor Plating	Silver
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Solder
Industry Standard	JIS,NTT
Accessories	Cap, hood
Remarks	Conversion adaptor (BWA series)

BNC BNC Series



Features

- Used as 50 ohm coaxial connectors for a wide range of applications.
- Compact size, lightweight, and quick insertion and extraction (bayonet lock coupling).
- Suitable for cables (RG-55/U and RG-58/U etc), with a finished outside diameter of 3 to 8mm.
- Conforms to Defense Agency NDS XC 6103, DSP C 6202, JIS C 5412, NTT, and MIL standards.

Applications

Communications equipment, Broadcast equipment, Measurement equipment

Specifications

Item	Requirements
Generic Name	BNC
Contact Plating	Gold, silver
Characteristic Impedance (ohms)	50
Frequency Range	0 to 4(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	RG-55,58,59,62/U, RG-188A,196A/U,1.5D-2W,1.5C-2W,1.5D-2V,1.5C-2V,2.5D-2W,3D-XW,3D-2V,3C-2V,3C-2W,3C-2T,3C-2Z,5D-2V,5C-2V,5D-2W
Center Conductor Plating	Gold,Silver
Outer Conductor Plating	Silver, nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Clamp, crimp
Industry Standard	DSP ,JIS,NTT,MIL
Accessories	Cap, short plug
Remarks	Conversion adaptor (BWA series)

TNC TNC Series



Features

- Mechanically rigid fixed center contact.
- Mainly applicable to 1.5D-2V and 1.5D-2W coaxial cables.
- Cable connection method uses soldering for center conductor and crimping for external conductor.

Applications

Automobile telephones, Mobile radio equipment

Specifications

Item	Requirements
Generic Name	TNC
Contact Plating	Gold, silver
Characteristic Impedance (ohms)	50
Frequency Range	0 to 3(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	1.5D-2V,1.5D-2W
Center Conductor Plating	Gold,Silver
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Industry Standard	MIL
Remarks	Connection tool, conversion adaptor (BWA series)

Circular
Connectors

Rectangular
Connectors

Coaxial
Connectors

Memory Card

Modular
Connectors

Card Edge
Connectors

Board-to-Board
Connectors

Board-to-Wire
Connectors

FFC/FFC
Connectors

Optical Connectors
and Devices

Microwave
Components

SSMA HRMM Series



Features

- SSMA connectors meeting MIL and IEC standards.
- The stainless steel shell ensuring surprisingly high durability.
- Reduced in size to about 80% of HRM (SMA type) connectors.
- V.S.W.R. is 1.2 or less from DC up to 12.4GHz. Models for flexible cable, however, 1.2 or less from DC up to 1GHz.

Applications

Communications equipment, Transmission equipment, Measurement equipment

Specifications

Item	Requirements
Generic Name	SSMA
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 12.4(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	0.085 inch semirigid,,1.5D-2V,RG-196A/U
Center Conductor Plating	Gold
Outer Conductor Plating	Gold
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp/Solder
Industry Standard	IEC
Remarks	Connection tool, conversion adaptor (BWA series)

C05 UM Series



Features

- Small-size coaxial connectors that are suitable for thin coaxial cables with high reliability.
- Two types of lock are available: Screw-lock (S type) and quick-lock (Q type).
- Two cable connecting methods are available: crimping connecting system to work simply and accurately, and the screw-clamp system to work accurately.
- Q type is Japan Industrial Standard (JIS)-specified C05-type connector and conforms to SMB type coaxial connector.
- S type conforms to SMC type coaxial connector.

Applications

Microwave equipment, Mobile radio equipment, Broadcast equipment

Specifications

Item	Requirements
Generic Name	C05 (Q type)
Contact Plating	Gold, silver
Characteristic Impedance (ohms)	50
Frequency Range	0 to 1(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	RG-196A/U,1.5D-2V,1.5D-2W,2.5D-2V,2.5D-2W
Center Conductor Plating	Gold,Silver
Outer Conductor Plating	Gold, nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Clamp, solder
Industry Standard	DSP,JIS
Remarks	Connection tool, conversion adaptor (BWA series)

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

FPC/FFC Connectors

Optical Connectors and Devices

Microwave Components

Miniature push-on lock connectors (DC to 2GHz)

MSS Series



Features

- Slide-snap lock system achieves more or less perfect surface contacts in both the inner and outer conductors, and superior vibration-resistance properties.
- Two cable connecting methods are available: crimping connecting system and screw-clamp system.
- Conforms to Defense Agency NDS XC 6120, DSP C 6206 standard.
- MSS1 type for RG-55/U cable is not interchangeable with MSS type.
- The types for PCB can be mounted by soldering directly onto the PCB.

Applications

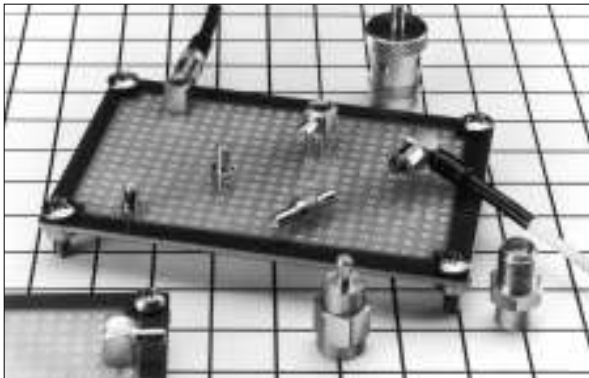
Communications equipment, Broadcast equipment, Measurement equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 2(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	RG-55/U, RG-196A/U, 1.5D-2V, 2.5D-2V
Center Conductor Plating	Gold
Outer Conductor Plating	Gold, nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Clamp, solder
Industry Standard	DSP
Remarks	Connection tool, conversion adaptor (BWA series)

Miniature push-on lock connectors (DC to 2GHz)

PO6 Series



Features

- Mating height of 10.5 or 6 mm.
- Approximately 80% of HIROSE's UM Series in size.
- Unique lock mechanism of coupling part has an excellent reliability such as vibration and shock resistance.
- V.S.W.R. is 1.2 or less from DC up to 2GHz.

Applications

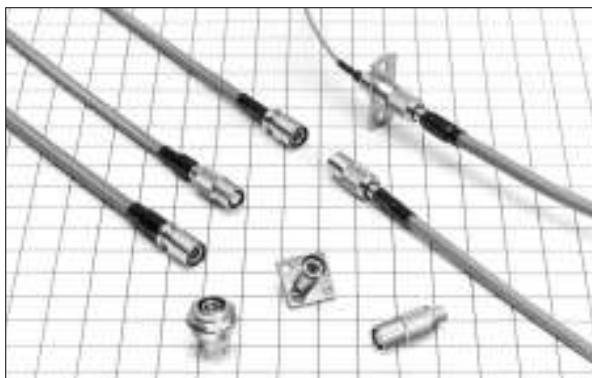
Microwave communications equipment, Communications equipment, Broadcast equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 2(GHZ)
Applicable Cable (mm)	RG-196A/U
Center Conductor Plating	Gold
Outer Conductor Plating	Gold, nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Remarks	Connection tool, conversion adaptor (BWA series)

Miniature push-on lock connectors (DC to 3GHz)

POD1 Series



Features

- Highly operable connectors incorporating a push-on complete lock mechanism.
- Perfect lock type with a diameter reduction of 50% compared with the TNC or BNC Series.
- Top-touch coupling method used for SMA type has good impedance matching and excellent noise resistance.
- V.S.W.R. is 1.3 or less from DC up to 3GHz.

Applications

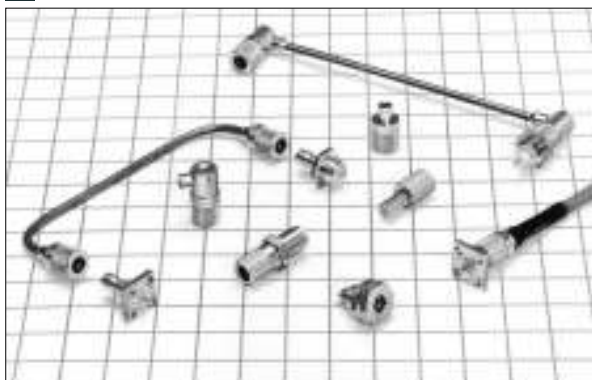
In-vehicle communications equipment in a wide variety, GPS, Measurement equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 3(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	1.5D-2V,1.5D-2W,2.5D-2V,CO-6F.FH-SB(Hitachi Cable, Ltd.),DFS111-UL1979(Junkosha Co., Ltd.)
Center Conductor Plating	Gold
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Accessories	Termination
Remarks	Connection tool, conversion adaptor

Miniature push-on lock connectors (DC to 8GHz)

POD Series



Features

- Push-on locking system to mate and remove quickly, easily and securely.
- The diameter size is reduced by 70% in comparison with HRM (SMA type) series.
- The coupling parts have spring mechanism parts to withstand twisting and scooping for high stability and reliability.
- Mating and removing with the fingers without using special tools.

Applications

Measurement equipment, Communications equipment, Control equipment, Broadcast equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 8(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	1.5D-2V,1.5D-2W,2.5D-2V,0.085 inch semirigid
Center Conductor Plating	Gold
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp, solder
Accessories	Termination
Remarks	Connection tool, conversion adaptor (BWA series)

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

FP/CF/FC Connectors

Optical Connectors and Devices

Microwave Components

Miniature push-on lock connectors (DC to 12.4GHz)

POB Series



Features

- Compatible with HRM (SMA type) series in the mounting method and dimension, size, weight, electrical length, cable connecting method and tools.
- Push-on lock system enables to mate and remove easily and quickly.
- Mating and removing without spanners or torque wrenches and high mounting density.
- The structure and dimensions of the transmission path and the center contact and the dielectric materials are unified with HRM (SMA type).
- Coupling part has a structure with an innovative spring function unit and an outer cylinder to protect it to ensure high stability and reliability.

Applications

Communications equipment, Broadcast equipment, Measurement equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 12.4(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	3D-XW(Irrax),RG-142B/U, RG-55,58/U,0.141 inch semirigid,0.085 inch semirigid
Center Conductor Plating	Gold
Outer Conductor Plating	Gold, nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp,Solder
Accessories	Termination
Remarks	Connection tool, conversion adaptor (BWA series)

MIL standard SMP compatible push-on lock connectors

PO40G Series



Features

- Supports 18GHz for higher transmission speed large capacity communication system.
- Push-on locking mechanism assures high mated retention force.
- Compatible with MIL standard SMP.

Applications

Optical communication equipment, Measurement equipment, Electronic communication equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 18(GHZ)
Insulator	PTFE
Applicable Cable (mm)	0.047 inch semirigid,0.085 inch semirigid
Center Conductor Plating	Gold
Outer Conductor Plating	Gold, passivation
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp,Solder
Remarks	Connection tool, conversion adaptor (BWA series)

Miniature push-on lock connectors (DC to 0.14GHz)

MP Series



Features

- Compatible with HRM (SMA type) series in the mounting method and dimension, size, weight, electrical length, cable connecting method and tools.
- Push-on lock system enables to mate and remove easily and quickly.
- Mating and removing without spanners or torque wrenches and high mounting density.
- The structure and dimensions of the transmission path and the center contact and the dielectric materials are unified with HRM (SMA type).
- Coupling part has a structure with an innovative spring function unit and an outer cylinder to protect it to ensure high stability and reliability.

Applications

Communications equipment, Broadcast equipment, Measurement equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	75
Frequency Range	0 to 0.14(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	2.5C-XW(Irrax cable),2.5C-2W
Center Conductor Plating	Gold
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Accessories	Termination
Remarks	Connection tool

Miniature push-on lock connectors (DC to 2GHz)

PL71 Series



Features

- Ultra small.
- Top-touch lock ensures high stability and reliability.

Applications

Wire and wireless communication equipment, Measurement equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	75
Frequency Range	0 to 2(GHZ)
Insulator	PTFE
Applicable Cable (mm)	1.5C-QEW, 1.5C-QEW. CW
Center Conductor Plating	Gold
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

FFC/FFC Connectors

Optical Connectors and Devices

Microwave Components

C15 type connectors for satellite TV reception system

NF Series



Features

- Conforms to the specifications of Technical Standards RCZ-6015 of the Electronic Industries Association of Japan.
- V.S.W.R. is 1.2 or less from DC up to 1.5 GHz.
- Plugs are all provided with pin contacts and no need to work the tip of the center conductor of the cable to a conical shape.
- In both plugs and receptacles, the center contact are completely stationary and adequate measures have been taken to deal with cable shrinkage caused by temperature variations.

Applications

Satellite TV reception system, Satellite CATV reception system

Specifications

Item	Requirements
Contact Plating	Gold, silver
Characteristic Impedance (ohms)	75
Frequency Range	0 to 1.5(GHZ)
Applicable Cable (mm)	JIS C 3502 (TVEFCX), JCS No.381 (5C-FB)
Center Conductor Plating	Gold, silver
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	P: Crimp, WP: Clamp
Industry Standard	RCZ
Accessories	Accessories
Remarks	Water proof type available, connection tool

Push-on connectors compliant to NTT specifications 4172 version 1

3CV Series



Features

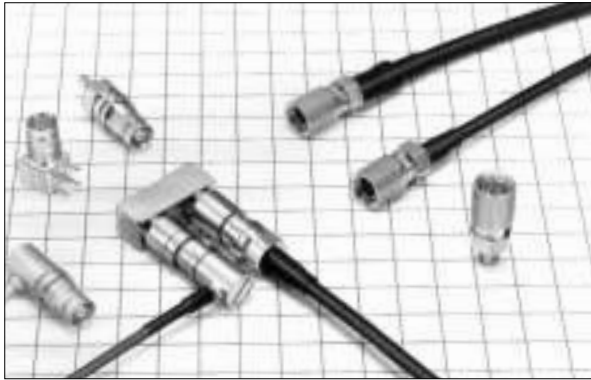
- Coaxial cable connectors for a variety of measurement purposes meet NTT specifications 4172 version 1.
- Ideally connecting to a variety of connectors mounted to carrier equipment.
- Compact yet excellent mechanical and electrical performance ensured.
- 1,000 insertion and extraction times guaranteed.

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	75
Frequency Range	0 to 0.2(GHZ)
Applicable Cable (mm)	3C-2V
Center Conductor Plating	Gold
Outer Conductor Plating	Silver
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Clamp
Industry Standard	NTT

Connectors compliant to IEC 169-13 1.6/5.6

MRF1.6/5.6 Series



Features

- Conforms to IEC169-13 1.6/5.6 requirements.
- Compatible with three types of mating systems (screw coupling, push-on, and plug-in).
- Jack can be used for three types of mating system, screw coupling, push-on and plug-in.
- Reduced in diameter to 70% of the BNC series.

Applications

Transmission and switching equipment, Measurement equipment, Communications equipment, Control equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	75
Frequency Range	0 to 0.5(GHZ)
Insulator	Tetrafluoride
Applicable Cable (mm)	RG-59,179/U,2.5C-2V,3C-2V,3C-2WS
Center Conductor Plating	Gold
Outer Conductor Plating	Gold
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Industry Standard	IEC
Remarks	Connection tool

Connectors for computers and terminals

TWT2 Series



Features

- Medium-sized, weather-resistant coaxial two-core connectors of screw coupling type, suitable for use with medium-sized coaxial two-core cables.
- Interchangeable with products conforming to MIL standards (plug: UG-421B/U and receptacle: UG-422/U)
- Suitable for noise-proof transmission.

Applications

Connecting computers and terminals

Specifications

Item	Requirements
No. of Positions	2
Contact Plating	Silver
Characteristic Impedance (ohms)	95
Frequency Range	0 to 0.2(GHZ)
Insulator	Synthetic resin
Applicable Cable (mm)	Special two-core coaxial cable(Sumitomo Electric Industries, Ltd.),RG-22B/U,Two-core coaxial cable (dia.6 to 9)
Center Conductor Plating	Silver
Outer Conductor Plating	Nickel
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Clamp
Industry Standard	MIL
Accessories	Cap
Remarks	Mate with MIL plug: UG-421B/U, MIL receptacle: UG-422/U.

Conversion adapters

BWA Series

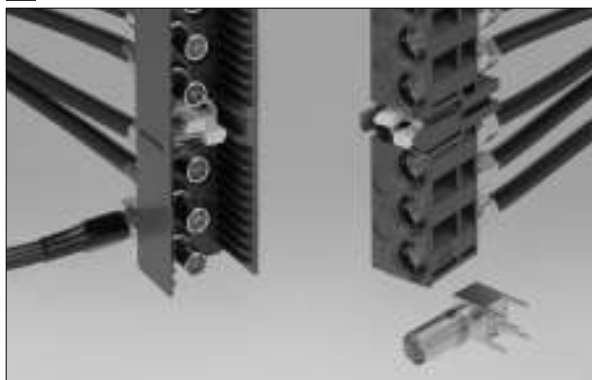


Features

- Converter adapters used for connecting connectors of different series.
- Mating portions compatible in materials and finish with the respective series.
- Conforms in performance to the lower series of the two coaxial connectors to be connected.

2mm hard metric coaxial connectors 50 ohms type

PO51M Series



Features

- Plug-in type conforming to 2mm hard metric standard (IEC 61076-4-1-101).
- 50 ohm coaxial connector conforming to DIN47297.
- The high frequency characteristics are consistent between the fully mated position and a position with a 1mm gap.

Applications

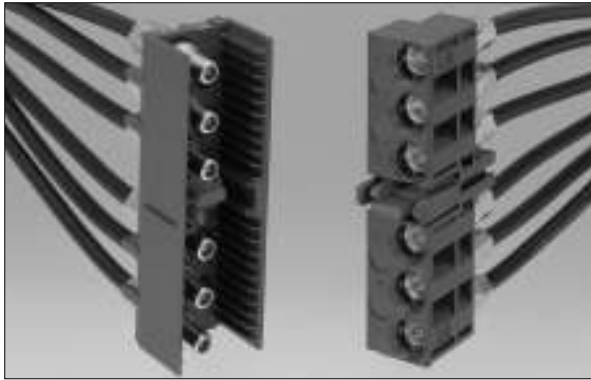
Conversion equipment, Transmission equipment, Base stations, Measurement equipment, Control equipment, Digital broadcast equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 3(GHZ)
Applicable Cable (mm)	1.5D-HQEW, 1.5D-2W or equivalent, .15D-HQEV, 1.5D-2V or equivalent
Center Conductor Plating	Gold
Outer Conductor Plating	Gold
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Industry Standard	IEC

2mm hard metric coaxial connectors 75 ohms type

PO82M Series



Features

- Plug-in type conforming to 2mm hard metric standard (IEC 61076-4-1-101).
- 75 ohm coaxial connector achieving excellent matching with HIROSE's unique opening section.
- The high frequency characteristics are consistent between the fully mated position and a position with a 1mm gap.

Applications

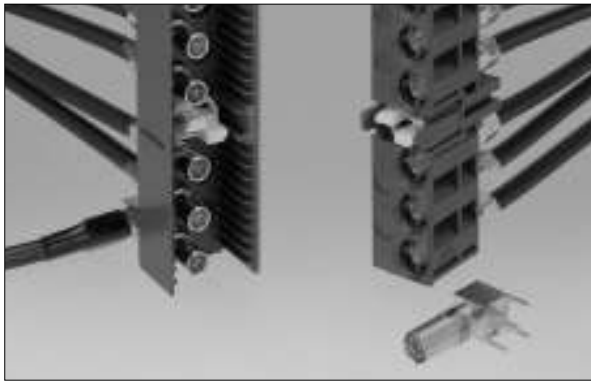
Conversion equipment, Transmission equipment, Base stations, Measurement equipment, Control equipment, Digital broadcast equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	75
Frequency Range	0 to 2(GHZ)
Insulator	PTFE
Applicable Cable (mm)	1.5C-QEV, 1.5C-2V or equivalent
Center Conductor Plating	Gold
Outer Conductor Plating	Gold
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp

2mm hard metric coaxial connectors (Housing case)

PO21M Series



Features

- 2mm hard metric standard (IEC 61076-4-1-101).
- 50mm housing case conforming to the hard metric standard.
- Mounted on the same board as the hard metric connector.
- Models including mold peg pin PCB fixing type conforming to the standard and HIROSE's unique screw fixing type.
- Supporting a variety of mounting forms.

Applications

Conversion equipment, Transmission equipment, Base stations, Measurement equipment, Control equipment, Digital broadcast equipment

Specifications

Item	Requirements
No. of Positions	6
Industry Standard	IEC
Insulator	PBT

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

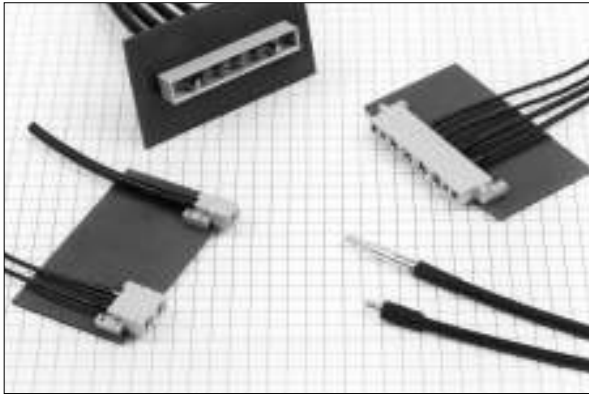
FFC/FFC Connectors

Optical Connectors and Devices

Microwave Components

Connectors for microwave digital system communications networks

PO73 Series



Features

- Coaxial connectors with a nominal impedance of 75 ohm that are ideally mounted to terminal units of microwave digital system communications networks, such as public telecommunication networks.
- Used as composite connectors in combination with the HRPI Series and PCN11MF Series, and suitable for high density packaging.
- Excellent connecting characteristics and mechanical durability are realized by applying the floating function to coaxial and optical connectors and connector housing.
- Coaxial connector (plug) incorporated in the connector housing can be detached in one-core units where the connector housing is coupled.
- The plug can be connected or disconnected without tools by sliding the snap-out ring attached to the coaxial connectors.

Applications

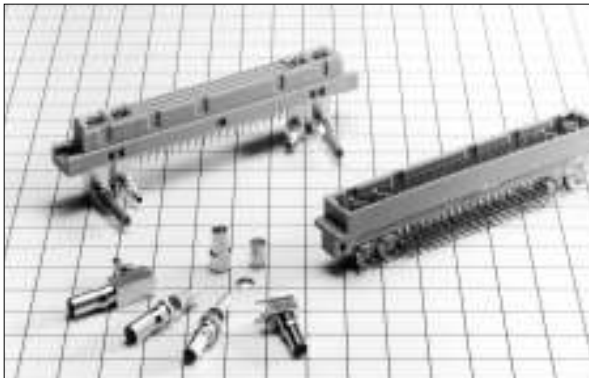
Communications equipment, Transmission and switching equipment in a wide variety

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50-75
Frequency Range	0 to 1.5(GHz):50ohms,0 to 1(GHz):75ohms
Insulator	PTFE
Applicable Cable (mm)	0.8D-2W, 1.5C-2V, 1.5D-2W, 2.5C-2V, 2.5D-2W, 3C-2T, 3C-2W, 3C-2V
Center Conductor Plating	Gold
Outer Conductor Plating	Gold
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Industry Standard	NTT
Accessories	Termination, 1core, 2core housing
Remarks	50 ohms type: PO73D

50 ohms, 75 ohms connectors compliant to DIN47297 standards

PO51 Series



Features

- Plug-in type used in combination with DIN41612 M-style connectors.
- Conforming to DIN47297 standards.
- In combination with a signal contact, high density mounting is possible.
- Plug-in type assuring easy and quick connection and disconnection.

Applications

Communications equipment, Transmission equipment, Measurement equipment

Specifications

Item	Requirements
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	0 to 1(GHZ)
Applicable Cable (mm)	1.5D-2V, 1.5C-2V
Center Conductor Plating	Gold
Outer Conductor Plating	Gold
Center Conductor Termination Method	Solder
Outer Conductor Termination Method	Crimp
Industry Standard	DIN
Remarks	Connection tool, extraction tool

Automotive connectors compliant to USCAR standard

GT5 Series



Features

- Twin-Crimp termination of the whole signal lines and shield lines.
- The PCB type and panel relay type are available.
- A dedicated retainer prevents the omission of pin insertion.
- Composite type (single shield x 2 + single power supply terminal) available.
- Waterproof type available.

Applications

In-car communications, Automotive sensors, Car audio speaker systems, GPS antenna systems

Specifications

Item	Requirements
No. of Positions	2-3-4
PCB Mount Type	Through hole
Contact Plating	Tin, tin-lead
Characteristic Impedance (ohms)	50
Frequency Range	0 to 2(GHZ)
Operating Temperature Range (°C)	-30 to 105
Applicable Cable (mm)	1.5D-2V,1.5C-2V
Center Conductor Plating	Tin
Outer Conductor Plating	Tin
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp

Automotive connectors supporting 5.8GHz

P05G Series



Features

- Push-on perfect lock type.
- Supports 5.8 GHz. DC to 3 GHz with a VSWR of 1.3 or below. 3 to 6 GHz with a VSWR of 1.5 or below.
- Supporting 50 ohm polyethylene foam insulation coaxial cable.
- PCB notch type.

Applications

ETC, GPS, VICS

Specifications

Item	Requirements
No. of Positions	1
PCB Mount Type	SMT
Contact Plating	Gold
Characteristic Impedance (ohms)	50
Frequency Range	DC to 6GHz
Operating Temperature Range (°C)	-40 to 105
Applicable Cable (mm)	1.5DS-GXC-SP,2.5DS-GXC(3.8)
Center Conductor Plating	Gold
Outer Conductor Plating	Tin
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

FPIC/FFC Connectors

Optical Connectors and Devices

Microwave Components

Small automotive connectors

GT13 Series



Features

- Permits crimping of center conductor and shield in one operation.
- Wide variety of connector type available and cable size and type acceptable.
- Compact and light weight comparing with HRS GT5 series.

Applications

Radio, TVÁATPMS(Tire Pressure Monitoring System), etc

Specifications

Item	Requirements
No. of Positions	1-2-3-4
PCB Mount Type	Through hole
Contact Plating	Tin
Characteristic Impedance (ohms)	50
Frequency Range	DC to 1(GHZ)
Operating Temperature Range (°C)	-30 to 105
Center Conductor Plating	Tin
Outer Conductor Plating	Tin
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp

Small automotive connectors supporting 6GHz

GT16 Series



Features

- Wide variety of connector type available.
- High performance of high frequency range.
- Compact and light weight comparing with HRS GT5 series.

Applications

GPS, Satellite radio, Bluetooth, DSRC, etc

Specifications

Item	Requirements
No. of Positions	1
PCB Mount Type	SMT,Through hole
Contact Plating	Tin
Characteristic Impedance (ohms)	50
Frequency Range	DC to 6GHz
Operating Temperature Range (°C)	-30 to 105(GT16C),-40 to 85(GT16)
Center Conductor Plating	Tin
Outer Conductor Plating	Tin
Center Conductor Termination Method	Crimp
Outer Conductor Termination Method	Crimp

Circular Connectors
Rectangular Connectors
Coaxial Connectors
Memory Card
Modular Connectors
Card Edge Connectors
Board-to-Board Connectors
Board-to-Wire Connectors
FPC/FFC Connectors
Optical Connectors and Devices
Microwave Components