

Receptacle



Signal 10 contacts with coaxial, with charging terminals (A type)



Signal 10 contacts with coaxial (B type)



For charging block, 3 contacts (B type)

Plug



Mini-plug for charging, 3 contacts (B type)



Mini-plug for USB connection, 4 contacts (B type)

FEATURES

[Features for Receptacles and Plugs]

1. Compliant with EIAJ RC-5238 (Connector A for IMT-2000 mobile phones)
2. Lineup also includes models for peripheral devices (accessories).
3. Compatible for high-speed transfers (USB compatible).
4. Hot plug compatible signal contact. (Step provided on contact location of receptacle.)
5. Metal shell to counter static electricity and EMI.

[Features for Plug]

1. Lineup of compact plugs ideal for mobility.
2. Plug mating mouth constructed without alignment location and with metal shell that covers. (Prevents opening of alignment location, has good appearance, and maintains twisting strength.)
3. Lock arm is covered by metal shell to counter deformation caused by outside force.
4. Constructed with bushings in two locations to ensure sufficient retention despite small size.
5. Smooth operation due to large lock button.

Compliance with RoHS Directive

ORDERING INFORMATION

1. Receptacle

AXR **3** **W**

3W: System connectors for W-CDMA

<Receptacle>

1: SMD (B type)

3: DIP (B type)

A: With charging terminal (A type)

<No. of contacts>

0: 10 contacts

3: 3 contacts

<Coaxial>

0: None

1: Available (a contact: without internal switch)

<Packing>

P: Embossed tape and paper reel × 2

V: Embossed tape and paper reel × 5

2. Plug

AXR **3** **W**

3W: System connectors for W-CDMA

<Plug>

0: Plug

<Type>

0: Mini type (B type)

<No. of contacts>

3: 3 contacts

4: 4 contacts

<Coaxial>

0: None

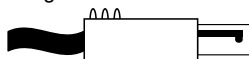
RECEPTACLE AND PLUG COMPATIBILITY TABLE

• Mini-plug (Cable connection type)



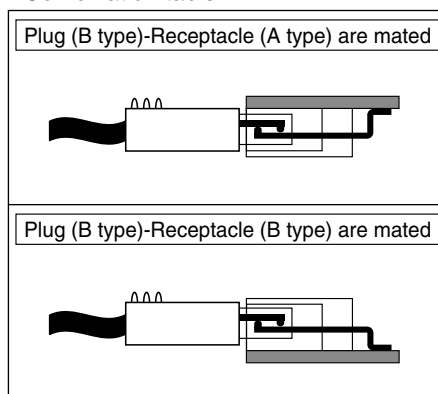
B type

Design side



3 contacts for charging: AXR3W0030
4 contacts for USB connection: AXR3W0040

• Combination table



• Receptacle



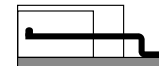
A type



10 contacts, coaxial and with charging terminals:
AXR3WA01P

Note: When using an AXR3W Series receptacle (A Type), it must be mounted on the bottom side of the board.

B type



10 contacts, coaxial: AXR3W101P
3 contacts: AXR3W330V

Note: When using an AXR3W Series receptacle (B Type), it must be mounted on the top side of the board.

Note: Please see page 133 for information about A Type and B Type.

PRODUCT TYPES

1. Receptacle

No. of signal terminals	Type	No. of coaxial	No. of charging terminal	Part No.	Packing quantity	
					Inner carton (1 reel)	Outer carton
3 contacts	For charging block	None	None	AXR3W330V	800 pcs.	4,000 pcs.
10 contacts	(B type)	Available	None	AXR3W101P	1,000 pcs.	2,000 pcs.
	(A type)	Available	2 contacts	AXR3WA01P	800 pcs.	1,600 pcs.

2. Plug (Cable connection type)

No. of signal terminals	Type	EMI immunity	Part No.	Packing quantity	
				Inner carton	Outer carton
3 contacts	Mini-plug for charging (B type)	Not available	AXR3W0030	—	2,000 pcs.
4 contacts	Mini-plug for USB connection (B type)	Available	AXR3W0040	—	2,000 pcs.

SPECIFICATIONS

1. Characteristics

1) Receptacle-Plug (cable connection type)

Item			Specifications		Condition
			Receptacle: 10 contacts, with 1 coaxial and 2 charge terminals		
Electrical characteristics	Rated Current	Signal terminal	1 A: 5 terminals (No.1, 4, 5, 6, 10), 0.5 A: Except 5 terminals		Measured based on the HP4338B measurement method of JIS C 5402, except for the resistance of the cord on the plug side. Using 250 V DC megger for signal portion and 100 V DC megger for coaxial portion (applied 1 min.) Rated voltage is applied for one minute and check for short circuit or damage with a detection current of 2 mA. Measured frequency: 1000 Hz ±200 Hz
	Rated voltage	Signal terminal	30 V AC/DC		
	Contact resistance	Signal terminal	Max. 50mΩ (Initial)		
		Coaxial portion	Max. 50mΩ (Initial)		
	Insulation resistance		Min. 1,000MΩ (Initial)		
	Breakdown voltage	Signal terminal	300V AC for 1 min.		
		Coaxial portion	100V AC for 1 min.		
Electrostatic capacity		Max. 2pF			
High frequency characteristics	Nominal impedance		50Ω		—
	Applicable frequency		1.92GHz to 2.17GHz		—
	Insertion loss		Max. 0.5dB		—
	VSWR		Max. 1.5dB		—
Mechanical characteristics	Lever lock strength		30 N for 1 min		The plug is pulled off with the connectors mated.
Lifetime characteristics	Insertion and removal life of plug and receptacle		10,000 times		The connectors are connected and disconnected at a rate of 500 times/hour or less.
Environmental characteristics	Ambient temperature		-25°C to +70°C		No freezing or condensation in low temperatures
	Storage temperature		-40°C to +85°C (The allowable storage temperature is -40°C to +50°C if unopened from original packaging)		No freezing or condensation in low temperatures
	Resistance to soldering heat	Receptacle	Reflow soldering: peak temperature 245°C or less		PCB surface temperature near connector terminal
Plug		Manual soldering: Soldering iron temperature 300°C, 5 sec. or less			
Unit weight			0.9g		—

AXR3W

2. Material and surface treatment

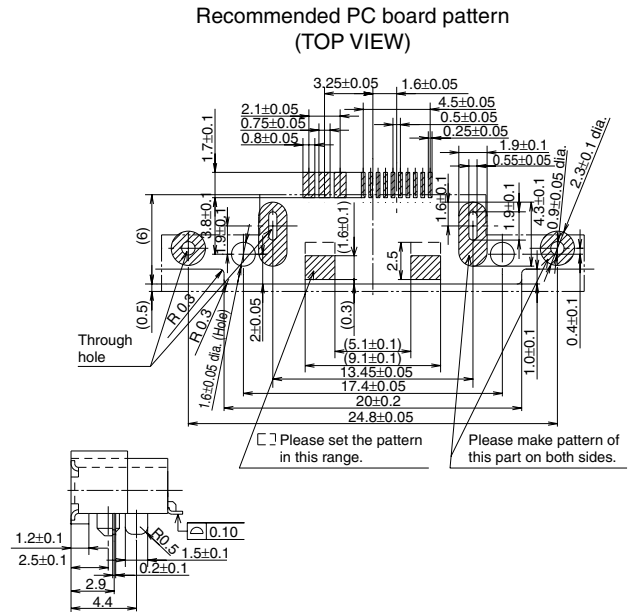
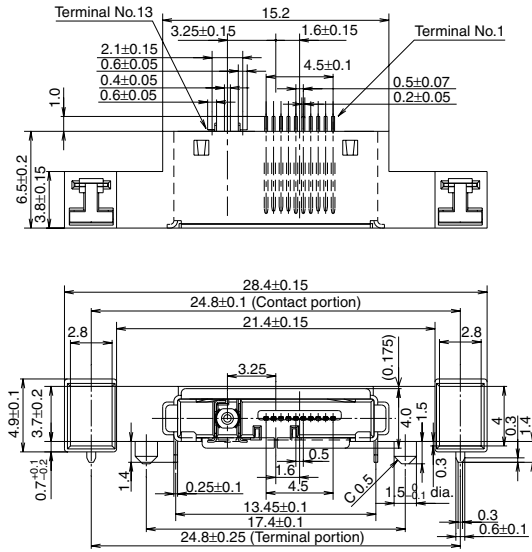
	Portion	Material	Surface
Receptacle	Resin-molding portion	Heat resistant resin (UL94V-0)	
	Shell (AXR3WA01P, AXR3W101P only)	Stainless steel	Ni plating on base, Pd + Au plating on surface
	Contact	Copper alloy	Contact portion: Ni plating on base, Au plating on surface Terminal portion: Ni plating on base, Au flash plating on surface (partial, not including edge)
	Retention fitting (AXR3W330V only)	Stainless steel	Cu plating on base, Sn plating on surface (except for fracture surface)
Plug (cable connection type)	Resin-molding portion	Heat resistant resin (UL94V-0)	
	Shell	Stainless steel	Ni plating (AXR3W0040 Ground metal plate only)
	Contact	Copper alloy	Contact portion: Ni plating on base, Au plating on surface Signal terminal soldering portion: Au flash plating over Ni
	Tapping screw	Steel	Rust proofed

DIMENSIONS (Unit: mm)

1. Receptacle

- Signal 10 contacts with coaxial, with charging terminals (A type)

Part number
AXR3WA01P

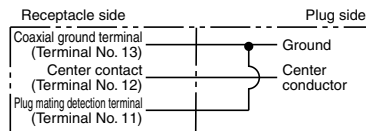
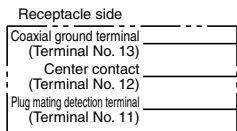


General tolerance: ± 0.3

Circuit diagram of coaxial portion

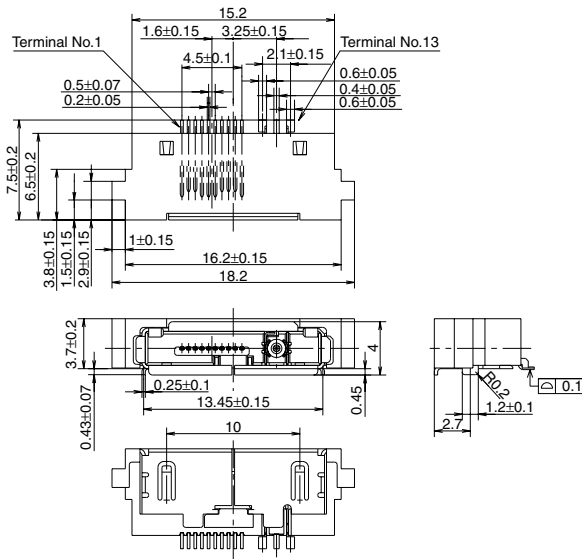
(1) Plug not mating condition

(2) Plug mating condition

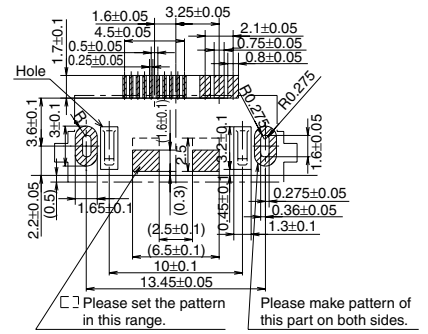


Signal 10 contacts with coaxial (B type)

Part number
AXR3W101P



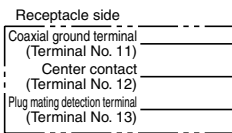
Recommended PC board pattern
(TOP VIEW)



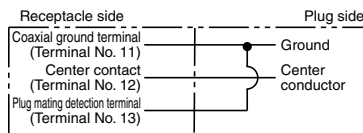
General tolerance: ± 0.3

Circuit diagram of coaxial portion

(1) Plug not mating condition

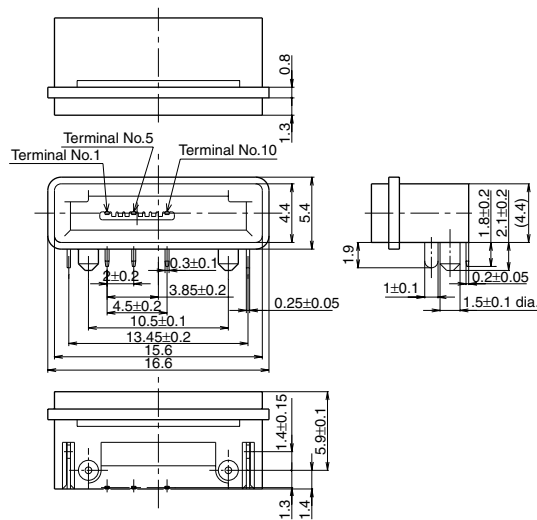


(2) Plug mating condition

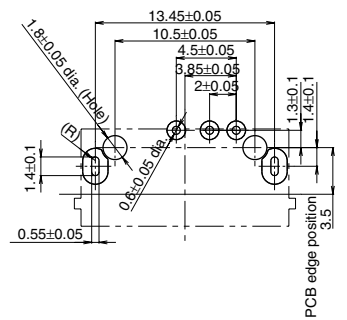


• For charging block, 3 contacts (B type)

Part number
AXR3W330V



Recommended PC board pattern
(TOP VIEW)



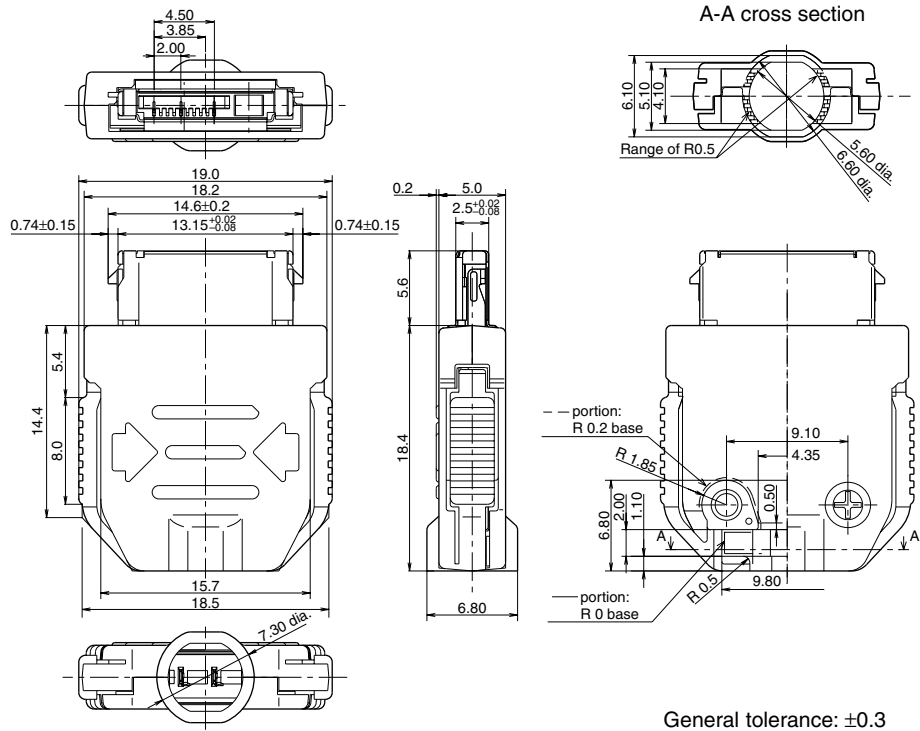
General tolerance: ± 0.3

AXR3W

2. Plug (Cable connection type)

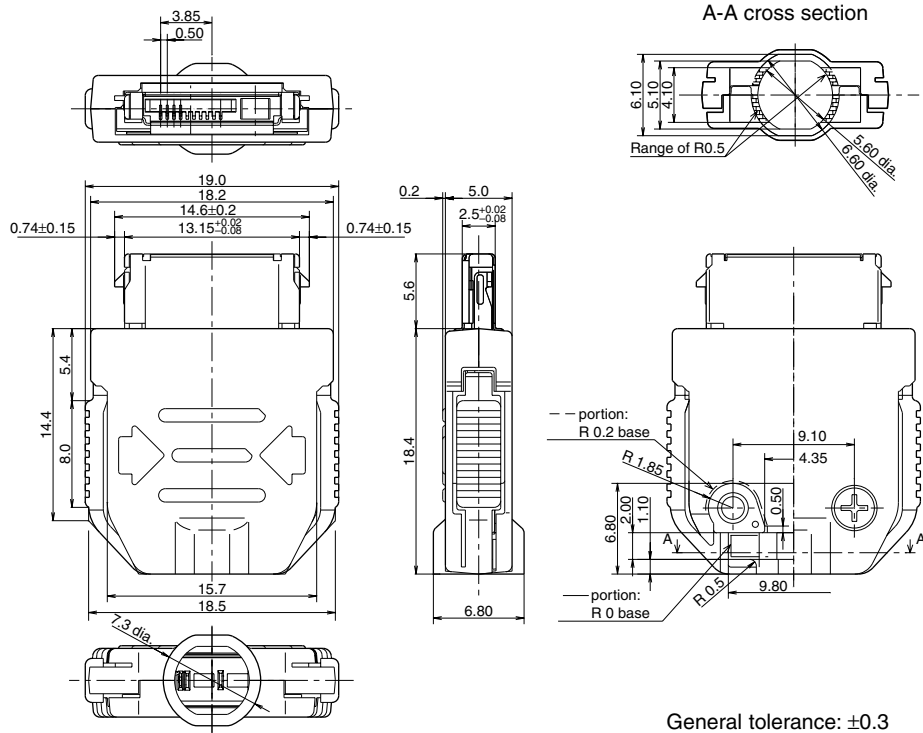
- Mini-plug for charging, 3 contacts (B type)

Part number
AXR3W0030



- Mini-plug for USB connection (B type)

Part number
AXR3W0040



NOTES

1. Being more compact and thinner than its predecessor, the bushing of this product has been molded together with the cable during manufacture.

Also, it is constructed so that the cable is not secured by clamps.

Therefore, please request the manufacturer where the assembly will take place to make bushings in accordance with the bushing build-in dimensions given on the product use diagram.

Also, if the cable is being pulled, please implement a method to secure the cable so that stress is not applied to the soldered parts of the contacts.

2. Avoid stripping the lower hole of the cover surface with a tapping screw. Tighten the screw with a torque of 0.059 N·m/0.6 kgf·cm or less.

For other details, please verify with the product specification sheets.