

Connectors

75Ω BNC Connectors

75Ω BNC Crimp Plugs

Canare added the new BCP-D series for 12G-SDI. SMPTE ST 2082-1 fully compliant connector makes UHD solutions as simple as existing SDI systems. The world's highest quality BNC includes BCP-B for 3G-SDI, BCP-A/C for up to HD.

■ BCP-D Series 12G-SDI

Return Loss: 20 dB @ 6 GHz, 15 dB @ 12 GHz

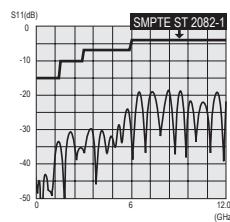
Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-D33UHD	L-3.3CUHD	—	BN1181	BN7003A	CB03	TCD-35CA
BCP-D55UHD	L-5.5CUHD	—	BN1175	B75004A	—	TCD-55UHD
Soon	BCP-D55UHW	L-5.5CUHWS	—	BN1192	BN7014	(TBD)
BCP-D57	—	4794R	BN1192	BN7002	—	TCD-57C
BCP-D8UHD	L-8CUHD, L-8CHD	—	BN1174	BN7147	—	TCD-8HD*

• Standard package (20pcs/100pcs)

*Crimp tool for TCD-8HD is TC-2



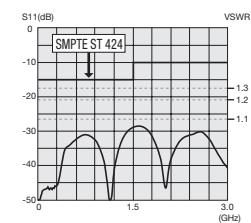
BCP-D55UHD



Return loss for BCP-D55UHD



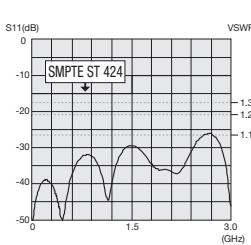
BCP-B5F



Return loss for BCP-B5F



BCP-A3



Return loss for BCP-A3

■ BCP-B Series

Return Loss: 26.4 dB @ 3 GHz

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-B25HD	L-2.5CHD, L-2.5CHLT	VDM230	B11015E	BN7129	CB02	TCD-35CA
BCP-B25HW	L-2.5CHWS, V4-2.5CHW	—	B11015E	BN7143	CB02	TCD-35CA
BCP-B26	—	1855A, 1855P	B11014E	BN7029C	CB02	TCD-35CA
BCP-B28	—	1855ENH, HD PRO 0.6/2.8 AF	B11015E	BN7052A	CB02	TCD-35CA
BCP-B3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB03	TCD-35CA
BCP-B31F	L-3CFW, V*-3CFW	—	B11015E	BN7015A	CB04	TCD-4CA, TCD-451CA
BCP-B4F	L-4CHD, L-4CFB, V*-4CFB	1505A, 1505ANH, VPM2000, HD PRO 0.8/3.7 AF	B11016E	BN7015A	CB04	TCD-4CA, TCD-451CA
BCP-B45HW	L-4.5CHWS	1694F	B11020D	BN7016	CB05A	TCD-35CA
BCP-B53	L-4.5CHD	1694A	B11020D	BN7046	CB05A	TCD-35CA
BCP-B56	—	HD PRO 1.0/4.8 AF	B11020D	BN7046	CB05A	TCD-35CA
BCP-B5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB05A	TCD-5CF, TCD-55FA
BCP-B51F	L-5CFW, V*-5CFW	—	B11020D	B75004A	CB05A	TCD-5CF, TCD-55FA

• Standard package (20pcs/100pcs)

Return Loss: 26.4 dB @ 2 GHz, 20.8 dB @ 3 GHz (*1)

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-A25	L-2.5C2V	—	BN1018A	BN7029C	CB02	TCD-35CA
BCP-A25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	CB02	TCD-35CA
BCP-A3	L-3C2VS, L-3C2V, V*-3C	—	B11014E	BN7003A	CB03	TCD-35CA
BCP-A31	L-3C2W	—	B11014E	BN7011	CB04	TCD-31C
BCP-A32	—	1506A, 1824A, 1825A, 1826A, 643948	B11016E	BN7026A	CB03	TCD-35CA
BCP-A3AHD	L-3C-AHD	—	B11016E	BN7003A	CB03	TCD-35CA
BCP-A3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB03	TCD-35CA
BCP-A4	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB04	TCD-4CA, TCD-451CA
BCP-A42	—	1505F	B11016E	BN7011	CB04	TCD-31C
BCP-A4F	L-4CHD, L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259, 9659, VPM2000, HD PRO 0.8/3.7 AF	B11016E	BN7015A	CB04	TCD-4CA, TCD-451CA
BCP-A5	L-5C2VS, L-5C2V, V*-5C	—	B11016E	BN7016	CB05A	TCD-35CA
BCP-A52	L-5C2W	—	B11016E	BN7014	—	TCD-451CA
BCP-A55	—	1695A, VSD2001TS	B11020D	BN7045A	CB04	TCD-35CA
BCP-A5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB05A	TCD-35CA
BCP-A77	LV-77S	8281F	B11016E	B75004A	CB05A	TCD-5CF, TCD-55FA
BCP-VA3	V*-3C	—	B11014E	BN7052A	CB03	TCD-35CA
BCP-VA5	V*-5C	—	B11016E	BN7045A	CB05A	TCD-35CA

• Standard package (20pcs/100pcs)

Note: Suitable die set for BCP-A5F is TCD-35CA; do not use TCD-5CF/TCD-55FA for BCP-A5F.

*1 Excluding BCP-A25, BCP-A25F and BCP-A4

● Canare crimp design ensures quick and reliable installation.

● Gold plated "snap locks" center pin and beryllium copper outer contact.

● Elongated body design for stable finger grip.

● Position mark on the body makes it easier to check if the connector is locked.

Be sure to use Canare Crimp Tool.

■ BCP-C Series

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-C1	L-1.5C2VS, V*-1.5C	83264, 83267	Solder	BN7022	CB01	TCD-1DB
BCP-C5HD	L-5CHD	—	BN1139	B75004A	CB05A	TCD-5HD
BCP-C6HD	L-6CHD	—	BN1083A	BN7074A	—	TCD-67HD
BCP-C71A	—	7731A, 9064, 9292, 1617A, 9011	BN1043A	BN7021A	—	TCD-7CA
BCP-C7FA	L-7CFB	—	BN1012B	BN7021A	—	TCD-7CA
BCP-C7HD	L-7CHD	—	BN1082A	BN7021A	—	TCD-67HD

• Standard package (20pcs/100pcs).

Return Loss: 26.4 dB @ 2 GHz (*2)



BCP-C6HD

*2: Excluding BCP-C1

■ BCP-LC Series (Right Angle)

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-LC3	L-3C2VS, L-3C2V, V*-3C	—	B11014E	BN7003A	—	TCD-35CA
BCP-LC3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	—	TCD-35CA
BCP-LC5	L-5C2VS, L-5C2V, V*-5C	—	B11016E	BN7016	—	TCD-35CA
BCP-LC5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	—	TCD-5CF, TCD-55FA

• Standard package (20pcs)

- Canare crimp design ensures quick and reliable installation.
- Gold plated “snap locks” center pin and beryllium copper outer contact.

Be sure to use Canare Crimp Tool.

Return Loss: 26.4 dB @ 2 GHz



BCP-LC3

75 Ω Slim BNC Crimp Plugs

■ MBCP-C Series

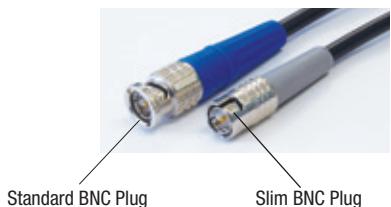
Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
MBCP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	—	TCD-35CA
MBCP-C3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB24	TCD-35CA
MBCP-C4	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB25	TCD-4CA, TCD-451CA
MBCP-C4F	L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259	B11016E	BN7015A	CB25	TCD-4CA, TCD-451CA
MBCP-C53	L-4.5CHD	1694A, 9064, 9116, 9118, 9248	B11020D	BN7046	CB26	TCD-35CA
MBCP-C5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB26	TCD-5CF, TCD-55FA

• Standard package (20pcs/100pcs)

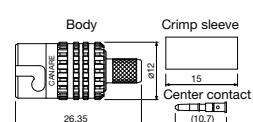
*3: Excluding MBCP-C25F

- Slim design: OD 12 mm
- Compatible with 75 Ω BNC receptacles.
- Canare crimp design ensures quick and reliable installation.
- Gold plated “snap locks” center pin and beryllium copper outer contact.

Be sure to use Canare Crimp Tool.



Standard BNC Plug Slim BNC Plug



MBCP-C3F

Technical Note

Voltage Standing-wave Ratio (VSWR) and Return Loss

Terminating the receiving end of a limited length coaxial cable using a resistance value not equal to its characteristic impedance creates a reflected wave that returns back down the cable to the sending end. The result is interference developing between the travelling wave and the return wave which results in a standing wave that causes voltage levels to fluctuate. The degree to which terminating resistance matches the characteristic impedance is indicated using the VSWR or voltage standing-wave ratio standard shown in Fig. 1. Going hand in hand with the VSWR ratio is the return loss factor which measures the size of the reflected wave current in relation to the travelling wave current. (See Fig. 2)

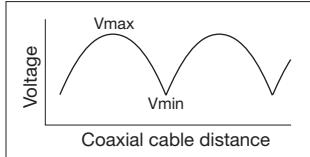


Fig. 1 Voltage Distribution Over Coaxial Cable

VSWR	Return Loss (dB)
2	9.54
1.5	13.98
1.2	20.83
1.1	26.44
1.05	32.26
1.02	40.09
1.01	46.06

Fig. 2 VSWR to Return Loss Conversion Table

Connectors

75Ω BNC Connectors

75Ω BNC Solder Plugs

■ BCP-H Series

Return Loss: 26.4 dB @ 1 GHz

Model	Suitable Cable	
	Canare	Others
BCP-H3B	L-3C2VS, L-3C2V, L-3CFB	—
BCP-H31F	L-3CFW	—
BCP-H45HW	L-4.5CHWS	1694F
BCP-H5B	L-5C2VS, L-5C2V, L-5CFB	—
BCP-H51F	L-5CFW, L-5CFB	—
BCP-H5/1	L-3C2VS, L-3C2V, L-3CFB L-5C2VS, L-5C2V, L-5CFB	—

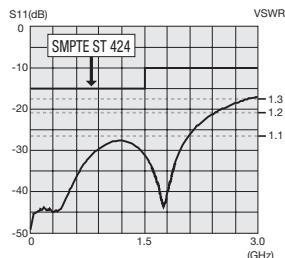
• Standard package (20pcs)

● The tubular (ferrule) section is silver plated to make soldering easier.

● Cable stripper TS100E can be used. (Excluding BCP-H31F, BCP-H51F)



BCP-H3B



Return loss for BCP-H3B



BCJ-C4



BCJ-D25HW

12G-SDI

75Ω BNC Jack Plug

Model	Suitable Cable	Center Pin	Sleeve	Boot	Die Set
BCJ-C4	RG-59 B/U, LV-61S, Belden 8241, 8279, 88241	Solder	V75001	CB25	TCD-4CA TCD-451CA
BCJ-D25HD	L-2.5CHD	BN1204	BN7159	—	TCD-D253F
BCJ-D25HW	L-2.5CHWS	BN1204	BN7158	—	TCD-D253F
BCJ-D33UHD	L-3.3CUHD	BN1205	BN7003A	—	TCD-D253F

• Standard package (20pcs)

● Return loss for BCJ-C: 26.4 dB @ 1.5 GHz, 20.8 dB @ 2.4 GHz

● Return loss for BCJ-D: 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz

Be sure to use Canare Crimp Tool



BCJ-C4



BCJ-D25HW

12G-SDI

75Ω BNC Extension Adapter

Model	Description
BCJ-JK	Jack to Jack, for 12G-SDI

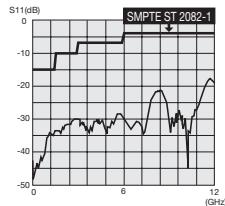
• Standard package (20pcs/100pcs)

● Return loss for BCJ-JK: 15 dB @ 12 GHz



BCJ-JK

12G-SDI

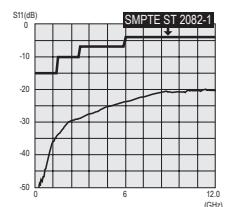


Return loss for BCJ-JK



BCP-TK

12G-SDI



Return loss for BCP-TK

75Ω BNC Termination Plugs

Model	Description
BCP-TK	True 75Ω Termination, for 12G-SDI
BCP-TK-CH	BCP-TK with String

• Standard package (20pcs/100pcs)

● Includes 1/4 watt resistance.

● Return loss for BCP-TK: 26.4 dB @ 3 GHz, 15 dB @ 12 GHz



BCP-TK

12G-SDI



Return loss for BCP-TK

Connector Boots

■ CBOx Series

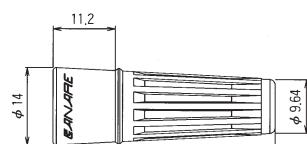
Our best selling connector boots for Canare BNC, TNC crimp plugs.

Model	Colors Available	BCP-xx	BP-xx	TNP-xx
CB01	BLK, BLU, GRN, RED, YEL, WHT	C1		
CB02		B25HD, B25HW, B26, B28, A25, A25F		
CB03	BLK, BLU, BRN, GRN, GRY, ORN, PPL, RED, YEL, WHT	D33UHD, B3F, B31F, A3, A32, A3AHD A3F, VA3	C3, C4	C3, C4
CB04		B4F, A31, A4, A42, A4F, A55	C31	C31
CB05A		B53, B56, B5F, B51F, A5, A5F, A77, VA5, C5HD	C5, C5FA	C5

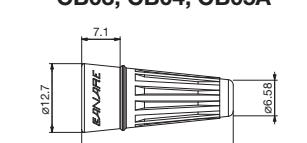
■ CB2x Series

Thinner type of CBOx series. Best fit for Canare Slim BNC, RCA, and F crimp plugs.

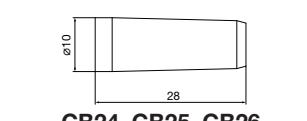
Model	Colors Available	Typical Connectors		
		MBCP-xx	RCAP-xx	FP-xx
CB24		C3F	C3A, C3F	C3, C3F
CB25	BLK, BLU, GRN, RED, YEL, WHT	C4, C4F	C3GS, C4A, C4F	C31, C4, C4F
CB26		C5F	C53, C5A, C5F	C5, C53A, C5F



CB03, CB04, CB05A



CB01, CB02



CB24, CB25, CB26

75Ω BNC Receptacles

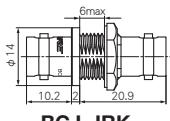
■ Jack to Jack 12G-SDI

Return Loss: 15 dB @ 12 GHz

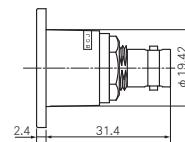
Model	Description	Flange
BCJ-JRK	Standoff	—
BCJ-JRUK		ITT XLR-F77
BCJ-JRUDK	Flush-mount	Neutrik D
BCJ-JRUDBK		Neutrik D (Black)

• Standard package (20 pcs)

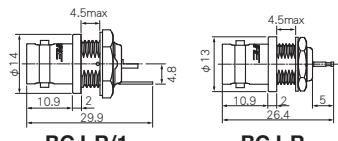
● Redesigned for 12G-SDI to minimize return loss.



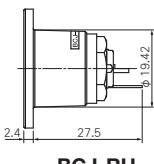
BCJ-JRK



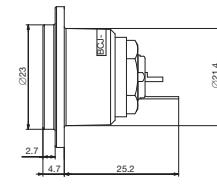
BCJ-JRUK



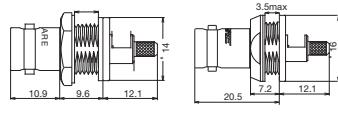
BCJ-R/1



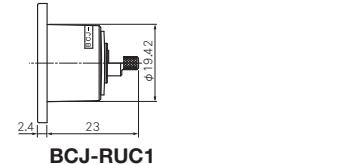
BCJ-RU



BCJ-RUD



BCJ-FC1-7/16

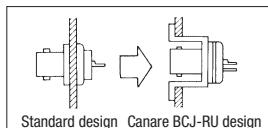


BCJ-RUC1

• Standard package (20 pcs)

● Panel Jack covers the rear wiring part with metal crimp sleeve.

● Flush-mount receptacle prevents damage on the jack.



■ Panel Hole Dimensions

BCJ-R	★BCJ-R/1 ★BCJ-JRK	BCJ-FC1	★BCJ-FC1-7/16	BCJ-RUC1 BCJ-RU BCJ-JRUK	BCJ-RUD BCJ-RUDB BCJ-JRUD(K) BCJ-JRUDBK(K)
8.1	9.6	11.3	9.7	18	10.9
φ9.6	φ11.2	φ13	φ11.3	φ3.4	φ9.6

★ marked models accept insulation bushing IU-7/16, and the panel hole for IU-7/16 should be adopted in this case. (see below)

Insulation Bushing

Model	Description
IU-7/16	ABS plastic

• Standard package: 20pcs

● Insulate a connector from a panel.

● 6 colors available (white, black, blue, green, red, or yellow)

Note: Please remove washers from a connector before using IU-7/16.

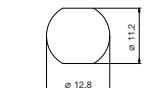
Panel Thickness:

1.2 to 1.5 mm: BCJ-DCJ, BCJ-FPLHA, BCJ-FPLV-12G, BCJ-FPLV-L, BCJ-FPLVA, BCJ-HBCJK, BCJ-R/1

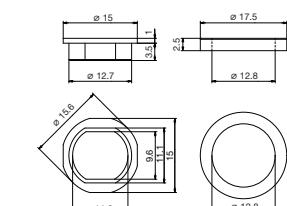
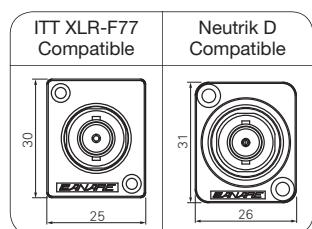
1.2 to 3.0 mm: BCJ-FC1-7/16, BCJ-FPC, BCJ-FPC02, BCJ-FPLV01, BCJ-JRK, BJ-JR, FJ-JR, FJ-FPC, NCJ-BCJR, RJ-JR



IU-7/16



Panel Hole Dimensions



Connectors

75Ω BNC Connectors

75Ω BNC PCB Mount Receptacles (Screw Type)

Front Mount

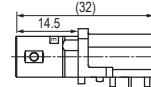
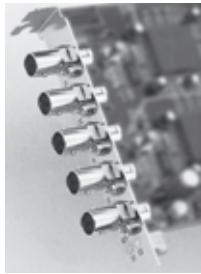
Model	Description	Stud Position	Panel Mount	Standard Package
BCJ-BPLHK	Right Angle, for 12G-SDI	Horizontal Front: M2.6 screw	20 pcs/100 pcs 20 pcs/100 pcs 10 pcs 10 pcs 10 pcs 10 pcs/100 pcs	
BCJ-BPLHA	Right Angle			
BCJ-BPLH2PA	Right Angle, Dual Jack			
BCJ-BPLH3PA	Right Angle, Triple Jack			
BCJ-BPCK	Straight, for 12G-SDI			
BCJ-BPC2P	Straight, Dual Jack			

Screws not included

Key Features and Benefits

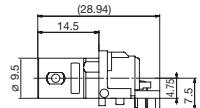
- True 75Ω PC board mount receptacle.
- Gold plated beryllium copper center contact.
- Right Angle types can be fixed on PC board with M2.6 screw.
- Space-saving design
- Eliminates wiring material and cost.

Note: Any cleaning solvents cannot be used. This leads to insulation problems.
Insulation material: m-PPO (m-PPE)

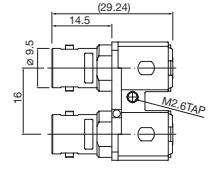


BCJ-BPLHK

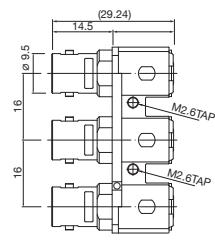
12G-SDI



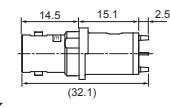
BCJ-BPLHA



BCJ-BPLH2PA

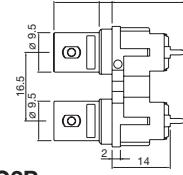


BCJ-BPLH3PA



BCJ-BPCK

12G-SDI



BCJ-BPC2P

Coming Soon



BCJ-BPLHK2P

12G-SDI

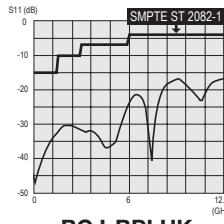
Rerun Loss:

BCJ-BPLHK: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz

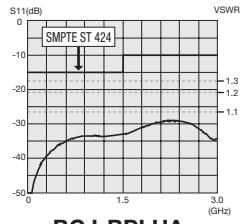
BCJ-BPLHA: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz

BCJ-BPCK : 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz

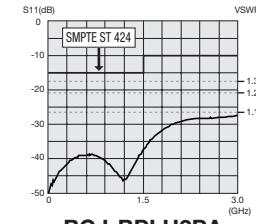
BCJ-BPC2P: 26 dB @ 1 GHz, 20 dB @ 2.5 GHz



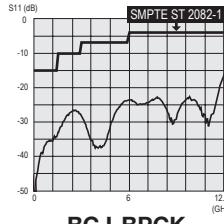
BCJ-BPLHK



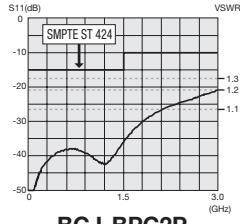
BCJ-BPLHA



BCJ-BPLH2PA



BCJ-BPCK



BCJ-BPC2P



BCJ-BPLHK2P

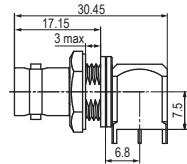
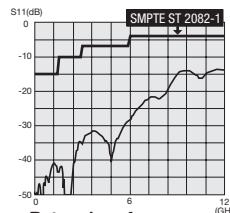
12G-SDI

	BCJ-BPLHK	BCJ-BPLHA	BCJ-BPLH2PA	BCJ-BPLH3PA	BCJ-BPCK	BCJ-BPC2P
Panel Hole Dim.	 Screw: M2.6 t1.6	 Screw: M2.6 t1.6	 Screw: M2.6 t1.6	 Screw: M2.6 t1.6	 Screw: M2.6 t1.2	 Screw: M2.6 t1.2
PCB Hole Dim.	 t2.0 (BOTTOM VIEW)	 t2.0 (BOTTOM VIEW)	 t1.6 (BOTTOM VIEW)	 t1.6 (BOTTOM VIEW)	 t2.0 (BOTTOM VIEW)	 t1.6 (BOTTOM VIEW)

75Ω BNC PCB Mount Receptacles (Hex Nut Type)

Front Mount

Model	Description	Stud Position	Panel Mount
BCJ-FPLV-12G	Right Angle, for 12G-SDI		
BCJ-FPLVA	Right Angle	Vertical	
BCJ-FPLV01	Right Angle, Low Cost		Front: Hex nut and lock washer
BCJ-FPLV-L	Right Angle, Long Neck		
BCJ-FPLHA	Right Angle	Horizontal	
BCJ-FPC	Straight		
BCJ-FPC02	Straight, Low Cost		

**BCJ-FPLV-12G****12G-SDI**

• Standard package: 20pcs/100pcs, except for BCJ-FPLV-L (10pcs).

Rear Mount

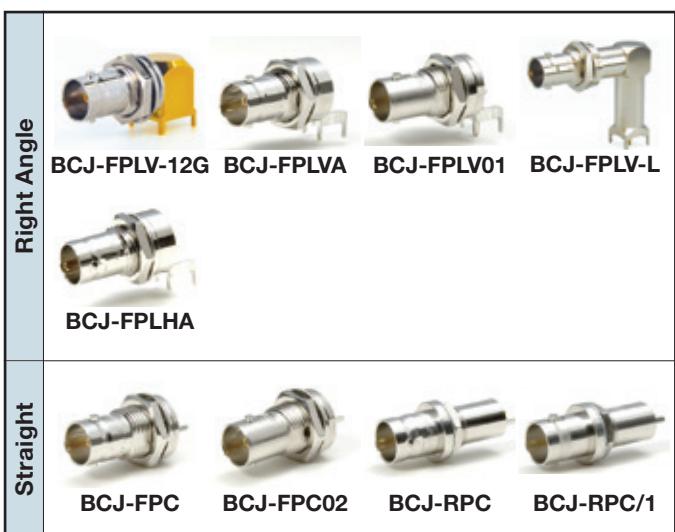
Model	Description	Stud Position	Panel Mount
BCJ-RPC	Straight, Through Hole Mount		Rear: Hex nut and lock washer
BCJ-RPC/1	Straight, Surface Mount	—	

• Standard package: 20pcs/100pcs.

- BCJ-FPLV-12G is specially designed to minimize the return loss for 12G-SDI.
- Return loss: BCJ-FPLV-12G: 15 dB @ 6 GHz, 10 dB @ 12 GHz,
BCJ-FPLV-L: 26.4 dB @ 3 GHz, Others: 26.4 dB @ 1 GHz.

Note: Any cleaning solvents cannot be used. This leads to insulation problems.

Insulation material: m-PPO (m-PPE)



<Panel Hole Dimensions>

BCJ-FPLV-12G*	BCJ-FPLVA*	BCJ-FPLV01*	BCJ-FPLV-L*	BCJ-RPC/1 BCJ-RPC

* BCP-FP series accept insulation bushing IU-7/16, and the panel hole for IU-7/16 should be adopted in this case. (see page 33)

<PC Board Hole Dimensions>

BCJ-FPLV-12G	BCJ-FPLVA BCJ-FPLV01 BCJ-FPLHA	BCJ-FPLV-L	BCJ-FPC BCJ-FPC02	BCJ-RPC

Connectors

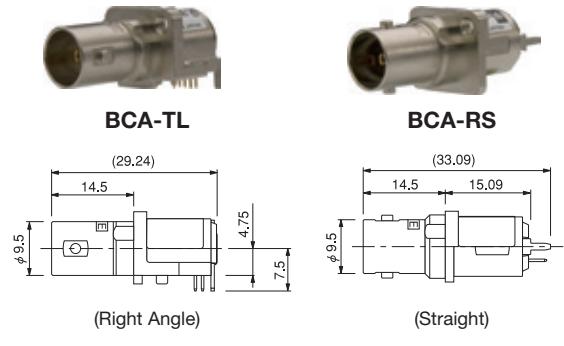
Active BNC

3G-SDI Active BNC

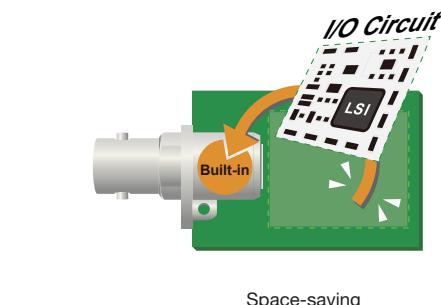
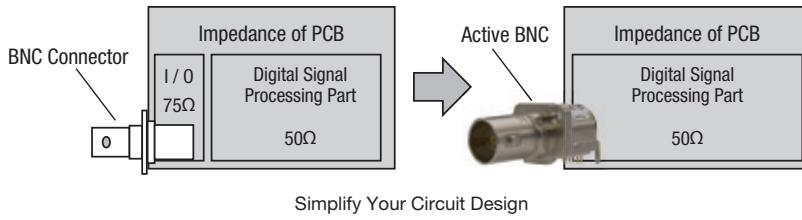
Small BNC connector incorporates either a cable equalizer or a cable driver. Active BNC makes innovation in your 3G-SDI PC board layout.

Model	Description	Type	Built-in IC
BCA-TL	Right Angle	TX	Cable Driver
		RX	Cable Equalizer
BCA-RS	Straight	TX	Cable Driver
		RX	Cable Equalizer

Sales unit: 5 pcs

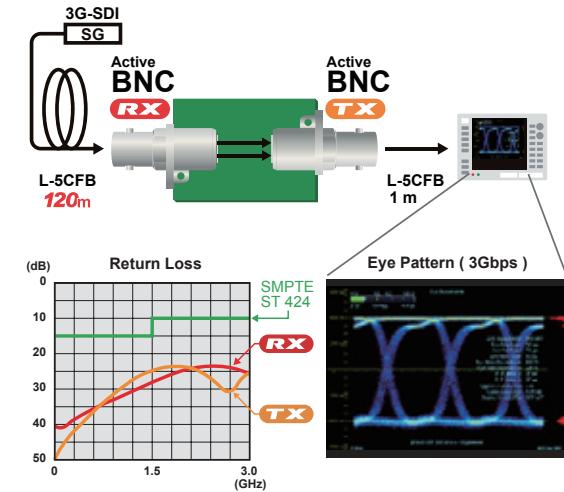


- BNC connector integrated with a cable equalizer or a cable driver, and yet keep the connector size to a minimum.
- Support 3G/HD/SD-SDI
- Offers an excellent return loss performance without designing 75 ohm I/O Circuit
- Simplifies PCB design process dramatically and will reduce entire development cost
- PCB space saving and help to downsize devices
- TX/RX identification by insulation color



Specifications

Model	TX BCA-TL, BCA-TS	RX BCA-RL, BCA-RS
Supply Voltage	DC 3.3 V	
Current Consumption	50 mA	70 mA
Operating Temperature	-25 °C to +85 °C	
Output Amplitude	800 mVpp	N/A
Equalization	N/A	3G-SDI 120m over L-5CFB
Standards	SMPTE ST 424, 292, 259, BTA S-004C, EN 50083-9	
Weight	9 g	



	BCA-TL	BCA-RL	BCA-TS	BCA-RS
Panel Hole Dim.				
PCB Hole Dim.	t1.6 Screw: M2.6 t2.0 (TOP VIEW)	t2.0 (TOP VIEW)	t1.6 Screw: M2.6 t2.0 (TOP VIEW)	t2.0 (TOP VIEW)

The dark shaded areas come into contact with the connector body.

12G-SDI Active BNC

NEW

12G-SDI Active BNC integrating I/O interface device inside. It frees you from struggling with PCB design coping with return loss and board space.

BCAK 12G-SDI

*Card Edge Connector NOT included

Model	Form	Type	Built-in
BCAK-TL	Right Angle	TX	Cable Driver
		RX	Cable Equalizer
		BiDi	Cable Driver & Equalizer
BCAK-TS	Straight	TX	Cable Driver
		RX	Cable Equalizer
		BiDi	Cable Driver & Equalizer

Sales unit: 5 pcs

- Assembled on a PC board with SMT Card Edge Connector.
- The pluggable 2-piece structure improves productivity and replaceability.

*Card Edge Connector sold separately

- Supports 12G/6G/3G/HD/SD-SDI
- Reduce entire development cost as well as development period.
- 16 mm: Minimum pitch between adjacent connectors
- Straight models can be mounted on the same board at the same height as 3G-SDI Active BNC.
- PIN control: status monitoring and mode change
- Command control for optimization and characterization
- Cable driver and equalizer with reclocker
- TX/RX/BiDi identification by insulation color

SMT Card Edge Connectors 12G-SDI

Model	Form	Suit for
AKU-20LFYG	Right Angle	BCAK-TL/RL/BL
AKU-20SFYG	Straight	BCAK-TS/RS/BS

Sales unit: 500 pcs/reel

- Card Edge Connector for BCAK.
- Same footprint for TX, RX and BiDi.
- Applicable for reflow soldering.



Specifications

Type	TX	RX	BiDi TX mode	BiDi RX mode
Supply Voltage	DC 2.5 V			
Current Consumption	195 mA	125 mA	128 mA	115 mA
Operating Temperature	-40 °C to +85 °C			
Output Amplitude	800 mV	N/A	800 mV	N/A
Equalization	N/A	12G-SDI 100m over L-5.5CUHD	N/A	12G-SDI 100m over L-5.5CUHD
Standards	SMPTE ST 2082-1, 2081-1, 424, 292, 259 BTA S-004C, EN 50083-9			
Weight	Right Angle: 9 g, Straight: 10 g			

Panel Hole Dim.	Right Angle	Straight
	 t1.6 Screw: M2.6	 t1.6 Screw: M2.6
PCB Hole Dim.	 use a M2.6 screw to fix BCAK to PCB.	 use a M2.6 screw to fix BCAK to PCB.

The dark shaded areas come into contact with the connector body.

Connectors

75Ω BNC, 75Ω N, Connectors

BNC Dust Caps

Model	Description
BCJ-DC	Polyethylene (Black)
BCJ-DC-CH	Polyethylene (Black) with string



BCJ-DC

- Standard package (20pcs/100pcs)

- Protects unused BNC receptacles from dirt and dust.

BNC - RCA Adapter

Model	Description
BCP-RCAJ	RCA Jack (F) to BNC Plug (M)
BCJ-RCAP	BNC Jack (F) to RCA Plug (M)

- Standard package (1pc)

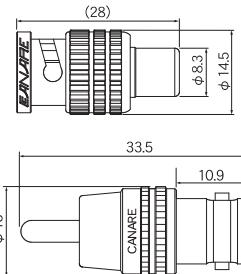
- Gold plated center contact
- Secure finger grip and reliable mating



BCP-RCAJ



BCJ-RCAP



75Ω N Solder Plug

Return Loss: 26.4 dB @ 2 GHz

Model	Suitable Cable
NCP-H8HD	L-8CHD

- Standard package (1pc)

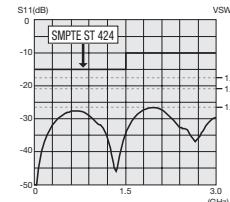
- Gold plating on the contact pin prevents deterioration, even after years of use.
- Return loss: 26.4 dB @ 2 GHz
- Solder type

Tools required: 17 mm and 21 mm wrenches

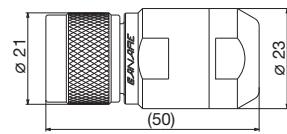
Caution: The connecting section of the N connector uses a shape that conforms to the IEC169-16's 75Ω impedance standard. Note that the 50Ω N and other connectors that do not conform to this specification cannot be connected.



NCP-H8HD



Return loss for NCP-H8HD



75Ω N to BNC Adapter

Return Loss: 26.4 dB @ 2 GHz

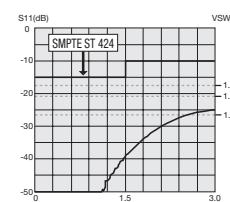
Model	Description
NCJ-BCJR	N (F) - BNC (F)

- Standard package (1pc)

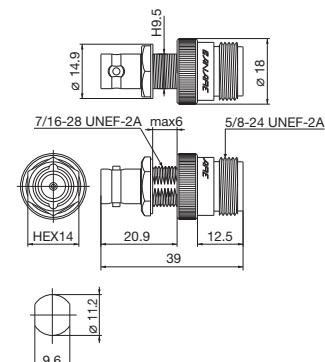
- Beryllium copper (gold plated) is used on the center contact for its superior spring characteristics.
- Return loss: 26.4 dB @ 2 GHz
- Panel mountable as well. For isolation from the panel, use Canare isolation bushing IU-7/16.(see page 33)



NCJ-BCJR



Return loss for NCJ-BCJR



Panel Hole Dimensions

75Ω Micro BNC Connectors

Micro BNC connectors supporting 12G-SDI. The micro BNC is about half the size of standard BNC and is ideal for high-density mounting.

■ Crimp Plugs 12G-SDI

Return Loss: 20 dB @ 3 GHz, 8 dB @ 12 GHz

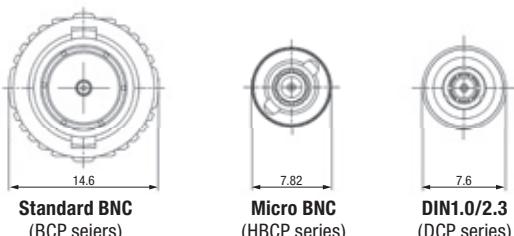
Model	Suitable Cable		Center Pin	Sleeve	Die Set
	Canare	Others			
HBCP-D25HD	L-2.5CHD, L-2.5CHLT	1855A	BN1198	BN7155	TCD-D253F
HBCP-D25HW	L-2.5CHWS, V4-2.5CHW	—	BN1198	BN7141	TCD-D253F
HBCP-D33UHD	L-3.3CUHD	—	BN1199	BN7003A	TCD-D253F
HBCP-D53	L-4.5CHD	1694A	BN1200	BN7157	TCD-D534F

*Standard package (20 pcs)

Key Features and Benefits

- Compatible with the Amphenol line of HD-BNC connectors
- SMPTE ST 2082-1 compliant
- Canare crimp design ensures quick and reliable installation
- Gold plated "snap locks" center pin
- Beryllium copper outer contact

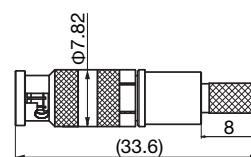
Be sure to use Canare Crimp Tool



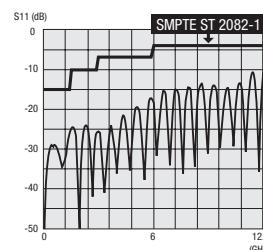
*The values are not the maximum diameter of the plugs.



HBCP-D25HD



HBCP-D25HD



Return loss for HBCP-D25HD

■ PCB Mount Receptacles 12G-SDI

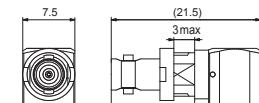
Return Loss: 20 dB @ 3 GHz, 10 dB @ 12 GHz

Model	Description	Nut Driver Bit
HBCJ-LRK	Right Angle	
HBCJ-LRK/1	Right Angle, Long type	NDT-HBC
HBCJ-FEMK	Edge Mount	

*Standard package (20 pcs)

- SMPTE ST 2082-1 compliant
- Combination of HBCJ-LRK/1 and HBCJ-FEMK is effective for staggered arrangement.

Note: Nut driver bit NDT-HBC is required.



HBCJ-LRK

HBCJ-LRK



HBCJ-LRK/1

HBCJ-FEMK



HBCJ-JRK

BCJ-HBCJK

<Panel Hole Dim.>

HBCJ	BCJ-HBCJK*

<PCB Hole Dim.>

HBCJ-LRK HBCJ-LRK/1	HBCJ-FEMK

**BCJ-HBCJK accept insulation bushing IU-7/16. See page 33 for the panel hole with IU-7/16.

■ Tools

Model	Description	Suitable Connector
NDT-HBC	Nut driver bit, 6.35 mm (1/4") hex shank	HBCJ, BCJ-HBCJK
BET-D/H	Extraction tool	DCP-C, HBCP-C

- Extraction tool BET-D/H is available for both Canare Micro BNC and DIN plugs.



Connectors

75Ω DIN Connectors

75Ω DIN 1.0/2.3 Connectors

Mini coax connectors IEC61169-29 and DIN 47 297 compatible.

Crimp Plugs

Return Loss: 20.8 dB @ 3 GHz

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
DCP-C25HD	L-2.5CHD, L-2.5CHLT	1855A, VDM230	BN1148	BN7136	—	TCD-D253F
DCP-C25HW	L-2.5CHWS, V4-2.5CHW	—	BN1148	BN7141	—	TCD-D253F
DCP-C3F	L-3CFB	—	BN1148	BN7003A	—	TCD-D253F
DCP-C4F	L-4CHD, L-4CFB	1505A, VPM2000	BN1158	BN7015A	—	TCD-D534F
DCP-C53	L-4.5CHD	1694A, VSD2001	BN1157	BN7138	—	TCD-D534F

• Standard package (20pcs/100pcs)

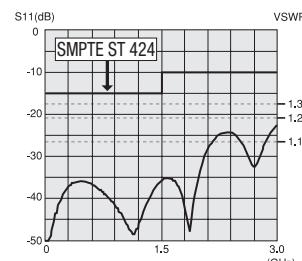
- Our unique ball-locking mechanism offers smooth and reliable mating.
- Canare crimp design ensures quick and reliable installation.
- Elongated body design enables stable finger grip.
- Return loss: 20.8 dB or greater up to 3 GHz
- Extraction tool : BET-DIN or BET-D/H (see page 48)

US Patent No.: 8764473 B2

Be sure to use Canare Crimp Tool



DCP-C25HD



Return Loss for DCP-C25HD

PCB Mount Receptacles

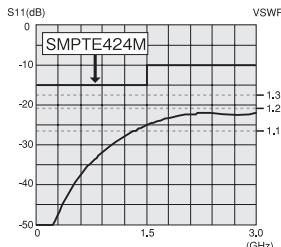
Return Loss: 20.8 dB @ 3 GHz

Model	Description	Nut Driver Bit
DCJ-LR	Right Angle	NDT-DIN
DCJ-LR/1	Right Angle, Long type	
DCJ-FEM	Edge Mount	

• Standard package (20 pcs)

- Compact design ideal for high density mounting and downsizing devices.
- Combination of DCJ-LR/1 and DCJ-FEM is effective for staggered arrangement.
- Return loss: 20.8 dB or greater up to 3 GHz.

Note: Nut driver bit NDT-DIN is required.



Return Loss for DCJ-LR

Adapters

Return Loss: 26.4 dB @ 3 GHz

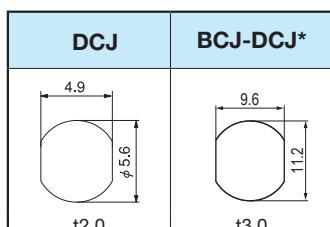
Model	Description	Panel Mount	Nut Driver Bit
DCJ-JR	Jack to Jack	Yes	NDT-DIN
BCJ-DCJ	BNC Jack to DIN1.0/2.3 Jack	Yes	N/A
BCP-DCJ	BNC Plug to DIN Jack	No	N/A

• Standard package (20 pcs)

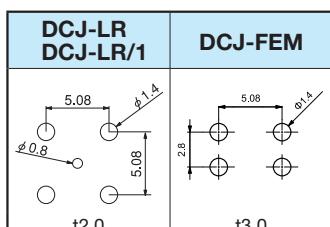
- Return loss: 26.4 dB or greater up to 3 GHz.

Note: Nut driver bit NDT-DIN is required for DCJ-JR

<Panel Hole Dim.>



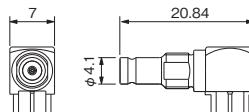
<PCB Hole Dim.>



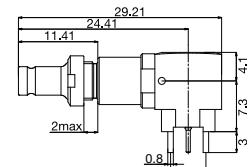
*BCJ-DCJ accepts insulation bushing IU-7/16. See page 33 for the panel hole with IU-7/16.

Nut Driver Bit

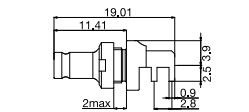
Model	Description
NDT-DIN	6.35mm (1/4") hex shank



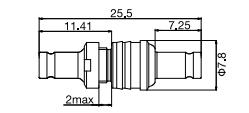
DCJ-LR



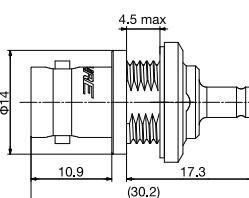
DCJ-LR/1



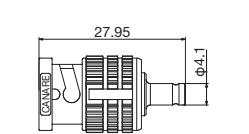
DCJ-FEM



DCJ-JR



BCJ-DCJ



BCP-DCJ



NDT-DIN

75Ω Micro-miniature Coaxial Connectors

Canare's exclusive micro miniature connectors, KC series: specially designed for 4K/8K UHD equipment. Our PCB mount solutions provide flexible layout and reliable connectivity on 12G-SDI signal path. Products are 12GHz verified and guaranteed SMPTE ST2082-1.

PCB Mount Receptacles 12G-SDI

Model	Description
KCM-PC	Straight
KCM-LR	Right Angle

Standard package: 20 pcs

KC to BNC Conversion Adapter 12G-SDI

Model	Description	Nut Driver Bit
BCJ-KCM	Rear Mount, Hex Nut	—
BCJ-FKCM	Front Mount, Grooved Nut	NDT-7/16

Standard package: 20 pcs

Note: BCJ-FKCM requires the nut driver bit NDT-7/16 for installation and removal.
Contact for the details.

Cable Assemblies 12G-SDI

Model	Description	
	Plug A	Plug B
KC1.2R-****-S	Straight	Straight
KC1.2R-****-L	Right Angle	Right Angle
KC1.2R-****-SL	Straight	Right Angle

Jacket: FEP (blue)

****: cable length (see below)

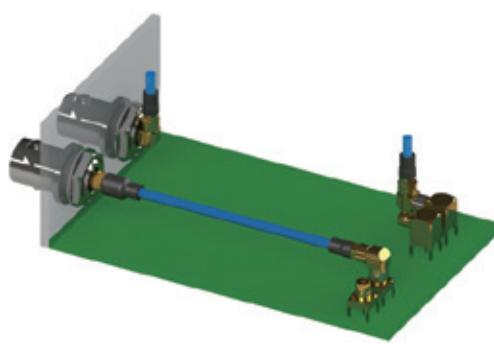
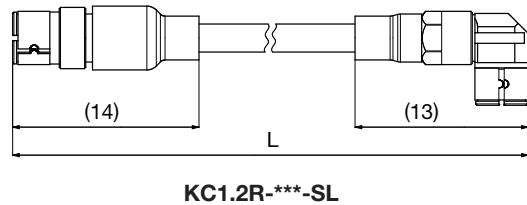
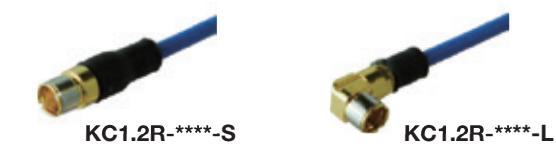
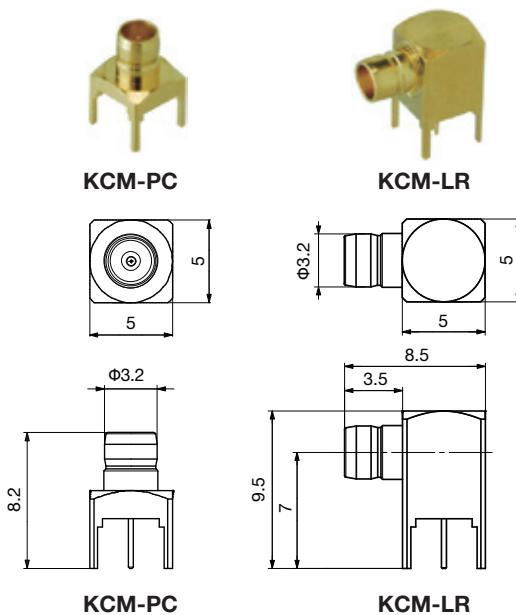
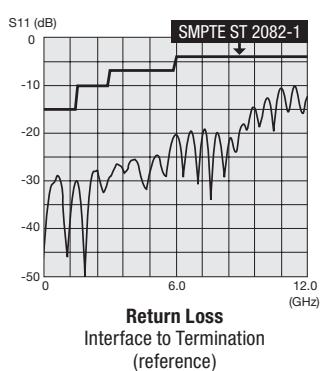
Ordering Information

KC1.2R -	0015	- S
Length _____		
0015	150 mm	S Straight
0020	200 mm	L Right Angle
0030	300 mm	SL Straight to Right Angle

Custom length available. Contact for the details.

Key Features and Benefits

- DC to 12 GHz; meets the SMPTE 2082-1 return loss requirements.
Return loss: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz,
10 dB @ 12 GHz
- Snap-on engaging
- Durable design; beneficial for maintenance.
- Temperature range: -40 to 85 degree C
- The best flexibility on PCB design



Connectors

75Ω Multichannel Coax Connectors

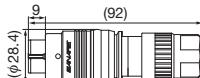
4K-DIN Coax Connectors

Canare unique “4K-DIN” allows you to connect or disconnect 4 of 3G-SDI signals in one easy step.

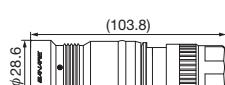
Crimp Plugs

Return Loss: 20 dB @ 3 GHz

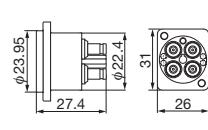
Model	Suitable Cable	Die Set	Description
MDM-V4C25HW	V4-2.5CHW	TCD-D253F	Male
MDF-V4C25HW	V4-2.5CHW	TCD-D253F	Female



MDM-V4C25HW



MDF-V4C25HW



MDF-V4JRU

Flush-mount Receptacle

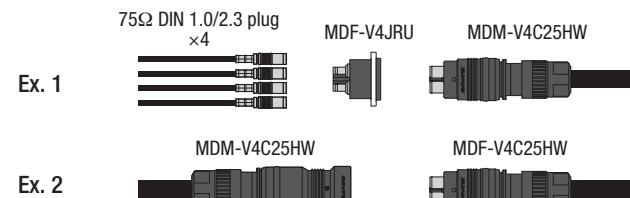
Return Loss: 20 dB @ 3 GHz

Model	Description
MDF-V4JRU	Jack to Jack

- 75Ω 4-channel coax connector with push-pull locking mechanism.
- Compact, solid, and lightweight nylon resin (PA 66) body
- Return loss: 20 dB @ 3 GHz
- MDF-V4JRU accepts MDM-V4C25HW and also DIN 1.0/2.3 plugs.

* Replacement crimp units also available:
DCP-C25HW-ML for MDM
DCJ-C25HW-ML for MDF

<Connection Example>



Be sure to use Canare Crimp Tool

Hole Dimensions
 Min. 44 mm pitch (recommended)

75Ω Multi-pin Coax Connectors

Handles five 75Ω coaxial connections.

Model	Suitable Cable	Die Set	Description
MCM-V5C3	V5-3C	TCD-35CA	Plug
MCF-V5C3	V5-3C, L-3C2V, L-3C2VS	TCD-35CA	Receptacle

Model	Description
DCM01	Dust Cap for MCM-V5C3
DCF01	Dust Cap for MCF-V5C3

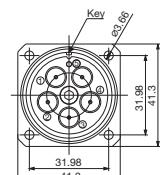
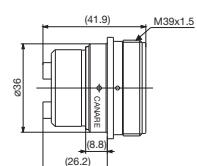
- 1.2 or less VSWR up to 1.5 GHz.
- Crimp system ensures quick and reliable installation.

* Replacement unit also available. MCM-V5C3: BN9078A MCF-V5C3: BN9079B

Be sure to use Canare Crimp Tool



MCM-V5C3



Panel Hole Dimensions
(Mounting screw M3 x 4 pcs)



Replacement Unit BN9078A



Replacement Unit BN9079B

75Ω Triaxial Connectors

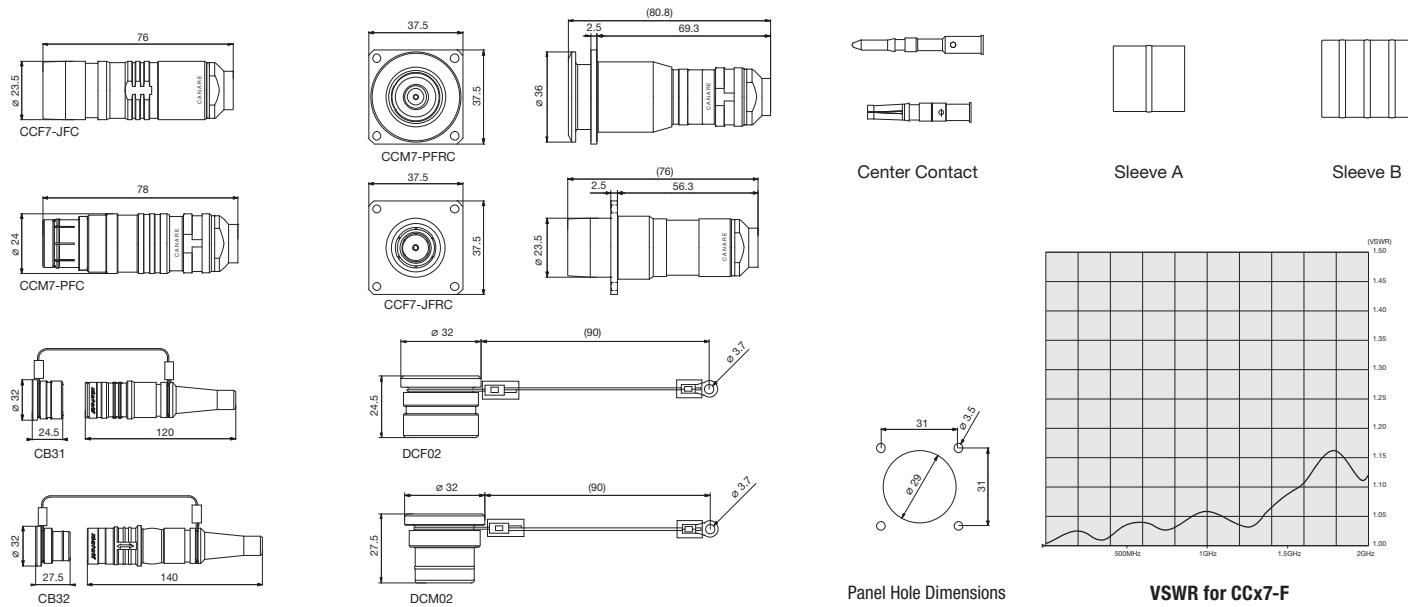
Canare CC series cover global triaxial interconnection. CC-F series are ideal for interconnecting European triax system and CC-K series for American triax system.

Key Features and Benefits

- True 75Ω, DC 1.5 GHz; ≥20 dB return loss ($\leq 1.2 \text{ VSWR}$)
- Reliable crimp system
- Push-lock mechanism
- Rugged and durable construction

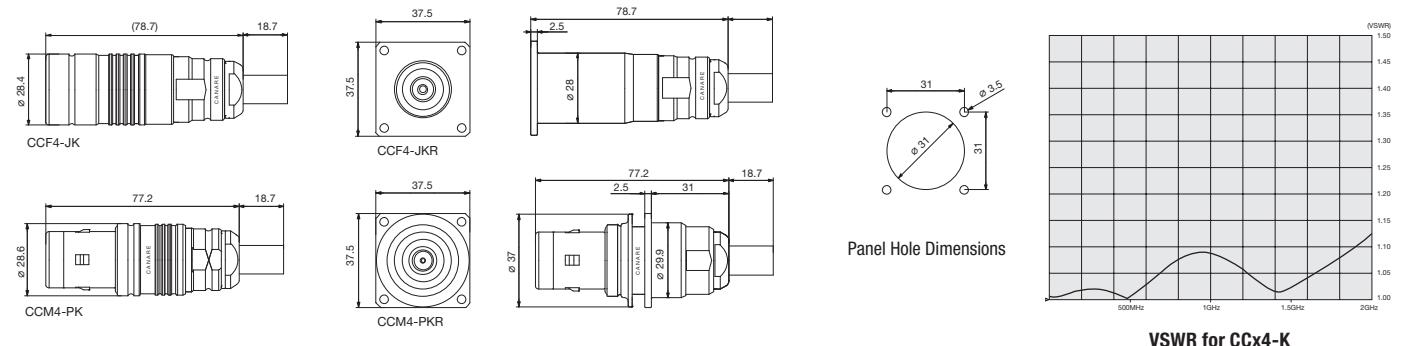
■ CC-F Series: European preferred type

Model	Description	Suitable Cable		Boot/Cap	Center contact	Sleeve A	Sleeve B	Crimp Tool
		Canare	Others					
CCF5-JFC	Crimp type, Female cable mount	L-5CFTX	Belden: 7783A	CB31	BN9194	BN7120	BN7121	TC-1 + TCD-65C
CCM5-PFC	Crimp type, Male cable mount		Klotz: TRIAX8	CB32	BN1135	BN7120	BN7121	
CCF5-JFRC	Crimp type, Female panel mount		Fujikura: 4.8/1.0 EFTXF	DCF02	BN9194	BN7120	BN7121	
CCM5-PFRC	Crimp type, Male panel mount			DCM02	BN1135	BN7120	BN7121	TC-2 + TCD-96C
CCF7-JFC	Crimp type, Female cable mount		Belden: 7784AS	CB31	BN9182A	BN7113	BN7114	
CCM7-PFC	Crimp type, Male cable mount		Klotz: TRIAX11	CB32	BN1131	BN7113	BN7114	
CCF7-JFRC	Crimp type, Female panel mount	L-7CFTX	Fujikura: SUPERFLEX11	DCF02	BN9182A	BN7113	BN7114	TC-2 + TCD-96C
CCM7-PFRC	Crimp type, Male panel mount			DCM02	BN1131	BN7113	BN7114	



■ CC-K Series: U.S. preferred type

Model	Description	Suitable Cable		Retrofit Kit	Boot/Cap	Crimp Tool
		Canare	Others			
CCF4-JK	Crimp type, Female cable mount	L-4CFTX	Belden: 1856A, 1857A, 9267	BN9127A	CB23	TC-1 + TCD-316C
CCM4-PK	Crimp type, Male cable mount		Gepco: LVT61859, VT61859	BN9128B	CB22	
CCF4-JKR	Crimp type, Female panel mount			BN9127A	DCM02	
CCM4-PKR	Crimp type, Male panel mount			BN9128B	DCM03	



Connectors

RCA Connectors

RCA Pin Connectors

Crimp Plugs

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
RCAP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	—	TCD-35CA
RCAP-C25HD	L-2.5CHD	—	B11015E	BN7129	—	TCD-35CA
RCAP-C3A	L-3C2VS, L-3C2V, V*-3C	—	B11014E	BN7003A	CB24	TCD-35CA
RCAP-C3GS	GS-6	—	BN1093	BN7079	CB25	TCD-35D
RCAP-C3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB24	TCD-35CA
RCAP-C42	—	1505F	B11016E	BN7011	—	TCD-31C
RCAP-C4A	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB25	TCD-4CA, TCD-451CA
RCAP-C4F	L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259, 9659	B11016E	BN7015A	CB25	TCD-4CA, TCD-451CA
RCAP-C53	L-4.5CHD	1694A, 9066, 9116, 9118, 9248	B11020D	BN7016	CB26	TCD-35CA
RCAP-C5A	L-5C2VS, L-5C2V, V*-5C	—	B11016E	BN7016	CB26	TCD-35CA
RCAP-C5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB26	TCD-5CF, TCD-55FA
RCAP-C77	LV-77S	8281F	B11016E	B75004A	CB26	TCD-5CF, TCD-55FA

• Standard package (20pcs/100pcs)

- Canare crimp design ensures quick and reliable installation.
- The crimp tool for the RCAP-C can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment.

Be sure to use Canare Crimp Tool.



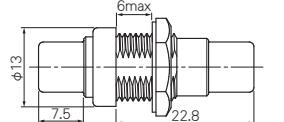
RCAP-C3A



F-09



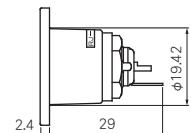
F-10



RJ-JR



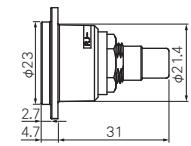
RJ-JR



RJ-RU



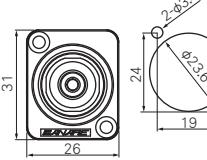
RJ-RU



RJ-JRUD



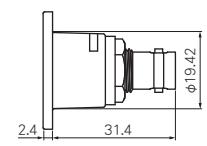
RJ-JRUD



RJ-BCJRUD



RJ-BCJRU



RJ-BCJRU

• Standard package (10 pcs)

- Robust metal shell
- Comfortable grip
- Cable OD up to 6.0 mm.

Standoff Receptacle

Model	Description
RJ-RJ	Jack to Jack

• Standard package: 20 pcs by insulation color

- Insulation color is available in 5 colors (red, green, blue, yellow, white).
- VSWR 1.2 @ 100 MHz

Flush-mount Receptacles

Model	Description	Flange Type
RJ-RU	RCA - Solder	ITT XLR-F77
RJ-RUD		Neutrik D
RJ-RUDB		Neutrik D (Black)
RJ-JRU	RCA - RCA	ITT XLR-F77
RJ-JRUD		Neutrik D
RJ-JRUDB		Neutrik D (Black)
RJ-BCJRU	RCA - BNC	ITT XLR-F77
RJ-BCJRUD		Neutrik D
RJ-BCJRUDB		Neutrik D (Black)

• Standard package: 20 pcs by insulation color

- Three types of flanges are available.
- Insulation color is available in 5 colors (red, green, blue, yellow, white).
- VSWR 1.2 @ 100 MHz

<Panel Hole Dimensions>

RJ-RJ (*)	ITT XLR-F77 Flange	Neutrik D Flange

(*) RJ-RJ accepts insulation bushing IU-7/16; in this case, panel hole for IU-7/16 should be adopted (see page 33)

F Connectors

This type is used in such applications as home television receivers for cable television (CATV) systems.

Crimp Plugs

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
FP-C25HD	L-2.5CHD	—	BN1003B	BN7129	—	TCD-35CA
FP-C3	L-3C2VS, L-3C2V, V*-3C	—	BN1002B	BN7003A	CB24	TCD-35CA
FP-C31	L-3C2W	—	BN1002B	BN7011	CB25	TCD-31C
FP-C3F	L-3CFB, V*-3CFB	—	BN1003B	BN7003A	CB24	TCD-35CA
FP-C4	LV-61S	8241, 8279, RG-59B/U	BN1003B	BN7015A	CB25	TCD-4CA, TCD-451CA
FP-C4F	L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259, 9659	BN1004B	BN7015A	CB25	TCD-4CA, TCD-451CA
FP-C5	L-5C2VS, L-5C2V, V*-5C	—	BN1004B	BN7016	CB26	TCD-35CA
FP-C52	L-5C2W	—	BN1004B	BN7014	—	TCD-451CA
FP-C53A	L-4.5CHD	1694A, 9066, 9116, 9118, 9248	BN1005B	BN7046	CB26	TCD-35CA
FP-C55A	—	1695A, 89120, 87120, 633948, 9116P	BN1005B	BN7045A	—	TCD-35CA
FP-C5F	L-5CFB, V*-5CFB	—	BN1005B	B75004A	CB26	TCD-5CF, TCD-55FA
FP-C71A	—	7731A, 9064, 9292, 1617A, 9011	BN1041A	BN7021A	—	TCD-7CA
FP-C7FA	L-7CFB	—	BN1030A	BN7021A	—	TCD-7CA

• Standard package (20pcs/100pcs)

- Lock mechanism improves reliability by preventing shifting or detaching of the center pin.
- The tools and cable stripper can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment.
- VSWR of 1.1 or less up to 2 GHz.
- Designed for indoor use.

Be sure to use Canare Crimp Tool.

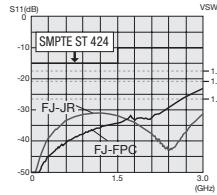


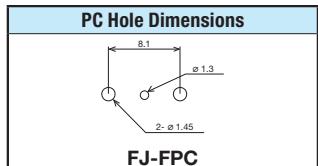
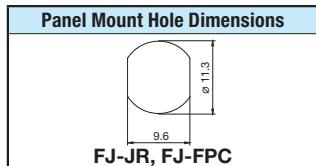
Fig.1 Return loss for FJ-FPC and FJ-JR

Standoff Receptacle

Model	Description
FJ-JR	Jack to Jack
FJ-FPC	PC Board Straight Mount

• Standard package (20pcs/100pcs)

- VSWR of 1.1 or less up to 2 GHz. <Fig. 1>
- Accept insulation bushing IU-7/16. See page 33 for more information.



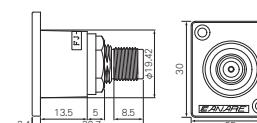
FJ-JR



FJ-FPC



FJ-JRU



FJ-JRU



FJ-JRUD



Flush-mount Receptacles

Model	Description	Flange Type
FJ-JRU	Jack to Jack	ITT XLR-F77
FJ-JRUD		Neutrik D
FJ-JRUDB		Neutrik D (Black)

• Standard package: 20 pcs

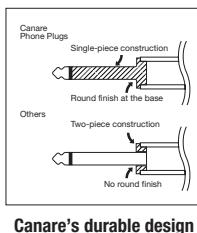
- Three types of flanges are available.

Phone Plugs

Model	Description
F-11	3.5 mm Mini Phone TS
F-12	3.5 mm Mini Phone TRS
F-15	6.3 mm (1/4") TS Phone
F-16	6.3 mm (1/4") TRS Phone

• Standard package (10pcs)

- Featuring a properly cable crimp system ensures long life reliability.
- Suited to cables up to 6.0 mm in outer diameter.



Canare's durable design



F-11



F-12



F-15



F-16

Connectors

50Ω BNC Connectors

50Ω BNC Crimp Plugs

VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.

Straight

Model	Suitable Cable	Center Pin	Sleeve	Boot	Die Set
BP-C3	L-3D2V, 3D-2V	BN1023A	BN7003A	CB03	TCD-35D
BP-C31	L-3D2W, 3D-2W	BN1023A	BN7011	CB04	TCD-3151D
BP-C4	RG-58C/U, RG-58A/U	BN1024A	BN7030A	CB03	TCD-35D
BP-C5	L-5D2V, 5D-2V	BN1025B	BN7016	CB05A	TCD-35D
BP-C51	L-5D2W, 5D-2W	BN1025B	BN7002	—	TCD-3151D
BP-C5FA	L-5DFB, 5D-FB	BN1016C	B75004A	CB05A	TCD-35DF
BP-C51F	L-5DFBW-PE	BN1016C	BN7002	—	TCD-55FA

• Standard package (20pcs)



BP-C5

Right Angle

Model	Suitable Cable	Center Pin	Sleeve	Die Set
BP-LC31	L-3D2W, 3D-2W	BN1023A	BN7011	TCD-3151D
BP-LC51	L-5D2W, 5D-2W	BN1025B	BN7002	

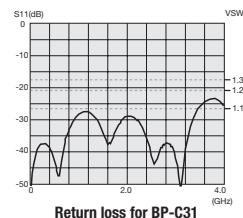
• Standard package (20pcs)



BP-LC31

- Lock mechanism used on insulation improves reliability by preventing shifting or detaching of the contact pins.
- Elongated body design for straight type enables easy attachment and removal.
- Gold plating on the contact pin prevents deterioration, even after years of use.
- Use of crimping to attach the connectors ensures quick, reliable installation.

Be sure to use Canare Crimp Tool.



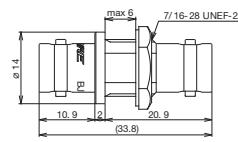
50Ω BNC Receptacles

Standoff

Model	Description
BJ-JR	Jack to Jack

• Standard package (20pcs)

- Mounting hole size is same as that for BCJ-R/1 connector.



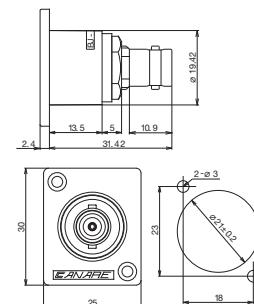
BJ-JR

Flush-mount Receptacles

Model	Description	Flange Type
BJ-JRU	Jack to Jack	ITT XLR-F77
BJ-JRUD		Neutrik D

• Standard package (20pcs)

- Two types of flanges are available.
- Flush-mount receptacle prevents damage on the jack.



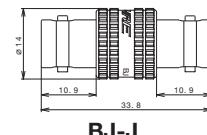
BJ-JRU

50Ω BNC Extension Adapter

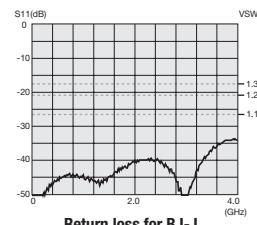
Model	Description
BJ-J	Jack to Jack

• Standard package (20pcs)

- VSWR of 1.1 or less up to 4 GHz.



BJ-J



Return loss for BJ-J

50Ω TNC Crimp Plugs

■ Straight

Model	Suitable Cable	Boot	Die Set
TNP-C3	L-3D2V, 3D-2V	CB03	TCD-35D
TNP-C31	L-3D2W, 3D-2W	CB04	TCD-3151D
TNP-C4	RG-58C/U, RG-58A/U	CB03	
TNP-C5	L-5D2V, 5D-2V	CB05A	TCD-35D
TNP-C51	L-5D2W, 5D-2W	—	TCD-3151D
TNP-C5F	L-5DFB, 5D-FB	CB05A	TCD-35DF TCD-55FA

• Standard package (20pcs)

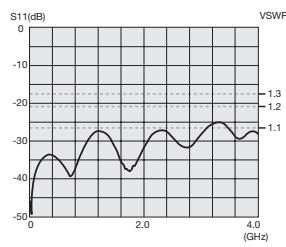
■ Right Angle

Model	Suitable Cable	Boot	Die Set
TNP-LC31	L-3D2W, 3D-2W	—	TCD-3151D
TNP-LC51	L-5D2W, 5D-2W	—	

• Standard package (20pcs)

- VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.
- Canare crimp design ensures quick and reliable installation

Be sure to use Canare Crimp Tool



TNP-C3

50Ω N Crimp Plugs

■ Straight

Model	Suitable Cable	Boot	Die Set
NP-C31	L-3D2W, 3D-2W	CB04	TCD-3151D
NP-C51	L-5D2W, 5D-2W	—	
NP-C5F	L-5DFB, 5D-FB	CB05A	TCD-35DF
NP-C51F	L-5DFBW-PE	—	TCD-55FA

• Standard package (20pcs)

■ Right Angle

Model	Suitable Cable	Boot	Die Set
NP-LC31	L-3D2W, 3D-2W	—	TCD-3151D
NP-LC51	L-5D2W, 5D-2W	—	

• Standard package (20pcs)

■ Straight Jack

Model	Suitable Cable	Boot	Die Set
NJ-C5F	L-5DFB, 5D-FB	CB05A	TCD-35DF TCD-55FA

• Standard package (20pcs)

- VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.
- Canare crimp design ensures quick and reliable installation

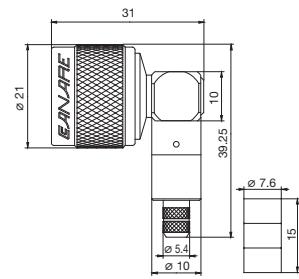
Be sure to use Canare Crimp Tool.



NP-C51



NP-LC31



NP-LC31

50Ω SMA Crimp Plugs

■ Straight

Model	Suitable Cable	Die Set
SMAP-C1	1.5D-QEW	TCD-1DB
SMAP-C31A	L-3D2W, 3D-2W	TCD-3151D
SMAP-C3F	L-3DFB	TCD-35DF
SMAP-C51	L-5D2W, 5D-2W	TCD-3151D
SMAP-C5F	L-5DFB, 5D-FB	TCD-35DF, TCD-55FA

• Standard package (20pcs)

■ Straight Jack

Model	Suitable Cable	Die Set
SMAJ-C3F	L-3DFB	TCD-35DF
SMAJ-C51	L-5D2W, 5D-2W	TCD-3151D
SMAJ-C5F	L-5DFB, 5D-FB	TCD-35DF, TCD-55FA

• Standard package (20pcs)

- VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.
(SMAP-C1: VSWR of 1.2 or less up to 2 GHz)
- Canare crimp design ensures quick and reliable installation
(SMAP-C1 has solder center contact)

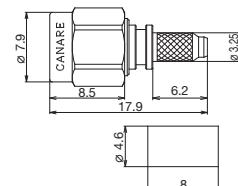
Be sure to use Canare Crimp Tool



SMAP-C1



SMAP-C31A



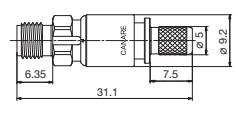
SMAP-C1



SMAP-C3F



SMAJ-C3F



SMAJ-C3F

Connectors

///// Cable Stripper, Crimp Tools

Coaxial Cable Stripper

Three internal circular steel blades perform precise, extremely clean and easy stripping.

Model	Preset to
TS100E	LV-77S-L-5CFB, V*-5CFB, V*-5C, LV-61S-L-4CFB, V*-3C
TS100U	L-2.5CHD, 1855A, 1505A, 1694A

- For most Canare BNC, DIN, RCA and F crimp plugs.
- Rotary knob to select 5 different cable setups.
- Make your own cable setting within cable O.D. 4mm~11mm
- Hex wrench is attached on the lid top for quick adjustment.
- One replacement blade included, and also sold separately.
Replacement blade: TSC (1pc)

Note:

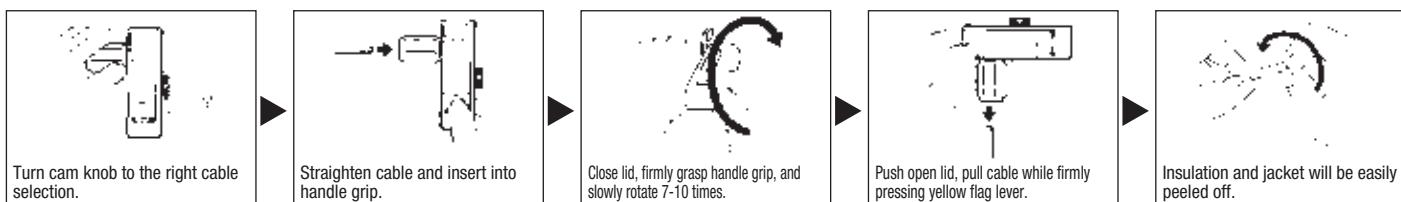
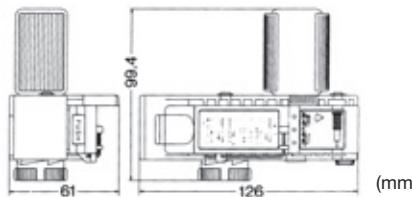
The following types of cables may not be accurately processed by

Canare's TS100 Cable Stripper, owing to their construction.

1. Cables employing such hard jacket material as polyethylene.
2. Cables employing such particularly soft insulator material as high-foam polyethylene.
3. Cables employing steel wire and semirigid pipe for outer conductor.



TS100E



Crimp Tools

Canare crimp tool offers reliable high-quality crimping performance in an easy-to-use design.

■ Die Sets ■ Hand Crimp Tools

Model	Model
TCD-1DB	
TCD-31C	
TCD-3151D	
TCD-316C	
TCD-35CA	
TCD-35D	
TCD-35DF	
TCD-4CA	
TCD-451CA	
TCD-5CF	
TCD-5HD	
TCD-55FA	
TCD-55UHD	
TCD-57C	
TCD-65C	
TCD-67HD	
TCD-7CA	
TCD-8HD	TC-2
TCD-96C	
TCD-D253F	TC-1
TCD-D534F	

- Select the appropriate die set to suit the individual connector
- Hand crimp tool is required for die set, and sold separately
- Die set are interchangeable



■ Accessories

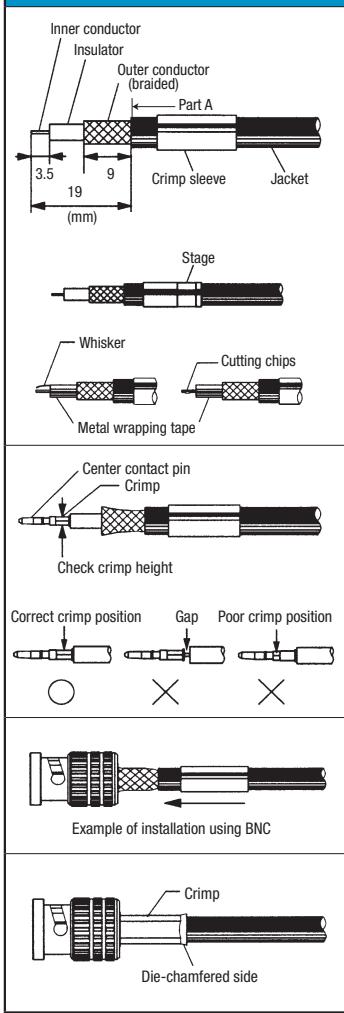
Model	Description	Length
TB-2A	Tool case	—
BET-12	Extraction tool for BNC straight plug	12 inch
BET-MBNC	Extraction tool for MBCP-C series	300 mm
BET-DIN	Extraction tool for DCP-C series	300 mm
BET-D/H	Extraction tool for DCP-C & HBCJ series	300 mm



TB-2A
(tools and connectors not included)



Crimp Connector Assembly Instructions



Confirm compatibility of the connector and cable prior to assembly.

- Slide the crimp sleeve over the cable and strip the jacket, braided shield, and insulation of the coaxial cable as shown at left.
- For cables with stranded inner conductor, twist the strands in the same direction as plied after removing the insulation.
- For a crimp sleeve with steps, slip it over the cable from the stepped end, as in the diagram.
- If any metal foil shield is left on the cable, it may get stuck in the mouth of connector, making insertion impossible.
- Remove all stray strands and offcuts of the metal foil shield to avoid possible short circuiting.
- Make sure the inner conductor is free of all insulation debris and offcuts to ensure complete crimping.

- Place the center contact pin of the connector on the inner conductor of the cable and crimp the center contact pin at the correct position (without remaining a gap) as shown at left, using the specified crimp tool and die set.

- To confirm the crimping properly, measure the crimp height after removing burrs with a knife. If it is not within the ideal value range, adjust the crimp tool.
- Do not crimp the center contact pin at the stepped root end.
- Confirm the center contact pin is crimped straight to the inner conductor. If the center contact pin is slanted, align it gently.

- Hold the cable and push it into the connector body until the center contact is locked in place. You may feel a click sound when the center contact pin is locked.

- Pull the cable gently (less than 4.5 lbs or 19.6 N) to confirm that is locked.
- Slide crimp sleeve up against connector body over the braided shield until it butts against the connector body. Center the die over the crimp sleeve and crimp in place, using the specified crimp tool and die set.
- Do not pull the cable while crimping is executed.

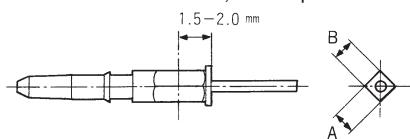
Adjusting Crimp Tool

1. Measuring Crimping height

Crimp height is measured after the crimp is made. As shown in the figure, the sum of the measured values for both directions is divided by two to arrive at the crimp height. The ideal value range for the BCP-A3 connector, for example, is 1.4 mm to 1.5 mm. When this value is lower (overcrimping occurs) than the recommended crimp height, the crimp becomes very hard. A value higher (undercrimping occurs) than the recommended value can result in increased electrical resistance and a physically weaker crimp. Either digital calipers or a micrometer should be used for measuring crimp height.

2. Measuring Frequency

Crimp height is measured prior to commencing use of the crimp tool and always when changing the crimping die. After this, the crimp height is regularly measured after about each 1,000 crimps.



$$\text{Crimp height value} = (A+B)/2$$

Refer to the separately included manual for the appropriate crimp height values for individual connectors.

3. Tool Measuring Procedures

Crimp force increases and crimp height decreases when the tool's adjuster dial is turned in the direction of the 9. The dial is adjusted by first releasing it using a screw driver.



F A Q

Q Does it matter in which direction crimp sleeves are attached?

A For BCP-A3—use and other non-stepped (straight type) crimp sleeves, it does not matter in which direction the crimp sleeve is attached. The attachment direction also does not matter for BCP-A5F—use and other specific-use types that have a chamfer (groove) at one end of the crimp sleeve.

However, stepped crimp sleeves such as those for BCP-C1, etc. are directional and must be attached in the direction shown in the diagram below, with the cable threaded through the sleeve starting from the end with the step (that is, the end with smaller-diameter hole).



Q What should be done with a metal foil shield?

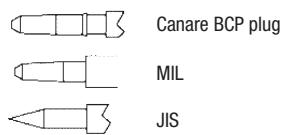
A Strip the metal foil shield to the root of the braided shield (to the edge of the jacket).

If any metal foil shield is left on the cable, it may get stuck in the mouth of connector, making insertion impossible.

Q Why do some BNC plugs made by other companies have a sharp point at the tip of the central contact? Are these compatible with Canare's BNC receptacles?

A The central contact is pointed in conformance with the JIS standard for 50 Ω BNC connectors. The central contacts on Canare's connectors conform to the MIL standard, and therefore are not pointed. These two different shapes simply offer different ways to guide the plug into the female receptacle and have no direct effect on contact quality.

The actual contact surfaces on Canare's BNC connectors are designed in conformance with JIS standards and therefore pose no compatibility problems.



Q Is it possible to use cables not listed in the connector compatibility table as long as they are close to the dimensions of those listed?

A No. While connection may be possible, performance may be adversely affected. Even if the connection appears to work, factors such as electrical instability, weak cable contact strength and others may cause problems during actual use.

Therefore, it is necessary to test and evaluate whether it is actually possible to use the configuration in question. Particular caution should be used when crimping is involved.

Q What is meant by "cable contact strength"?

A Cable contact strength refers to the maximum load borne by the cable when exerting tensile force to remove it from the connector. For Canare products, "cable contact strength" refers to the contact strength of a cable's outer conductor, not including the pull-out strength of the central contact or the contact strength of the inner conductor.

Q What is the approximate insertion loss associated with connectors?

A The value varies depending on the connector, but for BNC plugs, the value is approximately 0.1 dB per plug (DC–2 GHz).

Connectors

Cramp Tools

Cables to Connector Cross-Reference

BNC, Slim BNC, F, RCA

Cable	BNC			Slim BNC	F	RCA	Multi-pin MCM/MCF	Suitable Die Set	Crimp Height
	BCP-D/B	BCP-A/C	BCP-LC	MBCP-C	FP-C	RCAP-C			
L-1.5C2VS/V*-1.5C								TCD-1DB	N/A (solder pin)
1.5C-2V		BCP-C1							1.40 - 1.47
L-2.5C2V		BCP-A25							
L-2.5CFB		BCP-A25F		MBCP-C25F		RCAP-C25F			
1855A		BCP-B26							
1855P									
L-2.5CHD/L-2.5CHLT	BCP-B25HD				FP-C25HD	RCAP-C25HD			
VDM230									
1855ENH		BCP-B28							
HD PRO 0.6/2.8 AF									
1506A		BCP-A32							
L-2.5CHWS		BCP-B25HW							
V4-2.5CHW									
L-3C2V/L-3C2VS		BCP-A3					MC*-V5C3		
V3-3C/V4-3C		BCP-A3		BCP-LC3		FP-C3	RCAP-C3A		
V5-3C		BCP-VA3					MC*-V5C3		
L-3CFB	BCP-B3F	BCP-A3F	BCP-LC3F	MBCP-C3F	FP-C3F	RCAP-C3F		TCD-35CA	
V*-3CFB									
L-3C-AHD		BCP-A3AHD							
L-3.3CUHD	BCP-D33UHD								
1695A		BCP-A55			FP-C55A				
VSD2001TS									
L-3C2W		BCP-A31			FP-C31			TCD-31C	
L-3CFW		BCP-B31F							
V*-3CFW									
LV-61S		BCP-A4		MBCP-C4	FP-C4	RCAP-C4A			
RG-59B/U				MBCP-C4F	FP-C4F	RCAP-C4F			
L-4CFB/V*-4CFB		BCP-B4F	BCP-A4F					TCD-4CA or TCD-451CA	
1505A, 1505ANH									
HD PRO 0.8/3.7 AF									
VPM2000									
L-4CHD		BCP-A42				RCAP-C42		TCD-31C	
1505F									
L-4.5CHD		BCP-B53		MBCP-C53	FP-C53A	RCAP-C53			
1694A									
HD PRO 1.0/4.8 AF		BCP-B56							
L-4.5CHWS		BCP-B45HW						TCD-35CA	
L-5C2V/L-5C2VS		BCP-A5							
V*-5C		BCP-A5	BCP-LC5		FP-C5	RCAP-C5A			
LV-77S		BCP-A77				RCAP-C77			
L-5CFB		BCP-B5F	BCP-A5F (*1)	BCP-LC5F	MBCP-C5F	FP-C5F	RCAP-C5F	TCD-5CF or TCD-55FA excluding BCP-A5F (*2)	
V*-5CFB									
L-5CFW		BCP-B51F							
V*-5CFW									
8281F		BCP-A77				RCAP-C77			
L-5C2W		BCP-A52			FP-C52			TCD-451CA	
L-5CHD		BCP-C5HD						TCD-5HD	1.90 - 2.00
L-5.5CUHD	BCP-D55UHD							TCD-55UHD	
L-5.5CUHWS	BCP-D55UHW							TCD-57C	1.62 - 1.72
4794R	BCP-D57								
L-6CHD		BCP-C6HD						TCD-67HD	2.15 - 2.25
L-7CHD		BCP-C7HD							
L-7CFB		BCP-C7FA			FP-C7FA				
7731A		BCP-C71A				FP-C71A		TCD-7CA	1.90 - 2.00
9292									
L-8CHD/L-8CUHD	BCP-D8UHD							TCD-8HD	2.44 - 2.54
GS-6							RCAP-C3GS	TCD-35D	2.01 - 2.20

*1: Suitable die set for BCP-A5F is TCD-35CA

Micro BNC, DIN1.0/2.3, 4K-DIN

Cable	Micro BNC HBCP-D	DIN DCP-C	4K-DIN MDM/MDF	Suitable Die Set	Crimp Height
L-2.5CHD/L-2.5CHLT	HBCP-D25HD	DCP-C25HD			
1855A					
VDM230					
L-2.5CHWS	HBCP-D25HW	DCP-C25HW			
V4-2.5CHW			MD*-V4C25HW		
L-3CFB		DCP-C3F			
L-3.3CUHD	HBCP-D33UHD				
L-4CFB					
1505A					
VPM2000					
L-4CHD					
L-4.5CHD	HBCP-D53	DCP-C53			
1694A					
VSD2001					

Video Patch Plugs

Cable	Video Plug	Suitable Die Set	Crimp Height
L-2.5CHWS	VWP-C25HW MVP-C25HW	TCD-D253F	N/A (solder pin)
LV-61S	MCVP-C25HW SVP-C25HW	TCD-D253F	1.08 - 1.16
RG-59B/U	VWP-C4A MVP-C4	TCD-4CA or TCD-451CA	N/A (solder pin)

Be sure to use in the suitable combination of cable, connector, and die set

110Ω-75Ω Impedance Transformers

Passively convert AES/EBU digital audio signals from 110Ω/XLR3 output to a 75Ω BNC coaxial cable and then back again to a 110Ω/XLR3 input.

Adapter Type

Model	Description
BCJ-XJ-TRC	XLR3 (F) - BNC Jack
BCJ-XP-TRC	XLR3 (M) - BNC Jack
BCJ-XJ-A10TRC	XLR3 (F) - BNC Jack, 10dB Attenuation Pad



BCJ-XJ-TRC



BCJ-XP-TRC



BCJ-XJ-A10TRC



XJ3F-TRC-BCJ

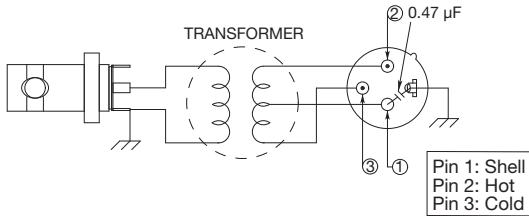


BCJ-TRC-XP3M

BCJ-XJ-TRC / BCJ-XP-TRC

75Ω BNC (unbalanced)

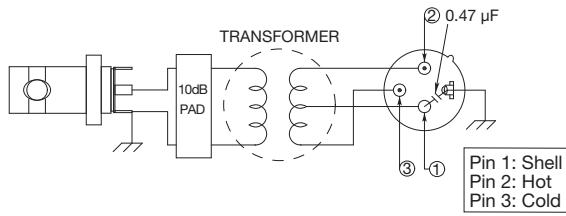
110Ω XLR3 (balanced)



BCJ-XJ-A10TRC

75Ω BNC (unbalanced)

110Ω XLR3 (balanced)



110Ω-75Ω Impedance Transformer: Input/Output Level Performance

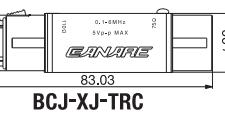
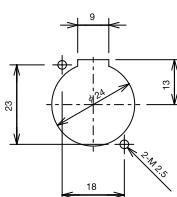
AES/EBU Transmitter (V)	Transformer Out (V)
2.0	1.60
3.0	2.39
4.0	3.18
4.5	3.60
5.0	3.98
6.0	4.78
7.0	5.58
8.0	6.38
9.0	7.18
10.0	7.98

BCJ-XJ-TRC/BCJ-XP-TRC

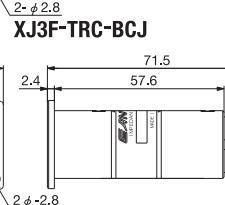
AES/EBU Transmitter (V)	Transformer Out -10dB Pad (V)
2.0	0.50
3.0	0.75
4.0	1.01
4.5	1.13
5.0	1.26
6.0	1.51
7.0	1.76
8.0	2.02
9.0	2.27
10.0	2.52

BCJ-XJ-A10TRC

Panel Hole Dimensions



BCJ-XP-TRC



BCJ-TRC-XP3M