

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

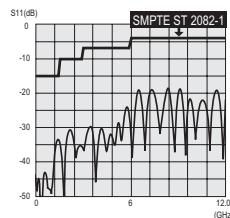
Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-D33UHD	L-3.3CUHD	—	BN1181	BN7003A	CB03	TCD-35CA
BCP-D55UHD	L-5.5CUHD	—	BN1175	B75004A	—	TCD-55UHD
BCP-D57	—	4794R	BN1192	BN7002	—	TCD-57C
NEW BCP-D8UHD	L-8CUHD, L-8CHD	—	BN1174	BN7147	—	TCD-8HD*

- Standard package (20pcs/100pcs)

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



BCP-D55UHD



Return loss for BCP-D55UHD

■ BCP-B Series

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)

■ BCP-A Series

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

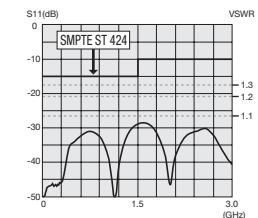
- Standard package (20pcs/100pcs)

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

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

- 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.

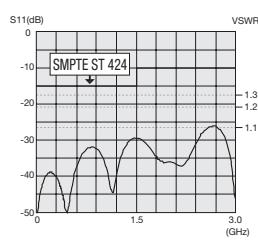
Be sure to use Canare Crimp Tool.



Return loss for BCP-B5F



BCP-A3



Return loss for BCP-A3

■ 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)



*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.

75 Ω Slim BNC Crimp Plugs

■ MBCP-C Series

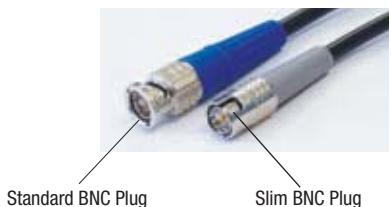
Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
MBCP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	—	TCD-35CA
MBCP-C3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB24	TCD-35CA
MBCP-C4	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB25	TCD-4CA, TCD-451CA
MBCP-C4F	L-4CFB, V*-4CFB	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)

Return Loss: 26.4 dB @ 1.5 GHz (*3)



*3: Excluding MBCP-C25F



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)

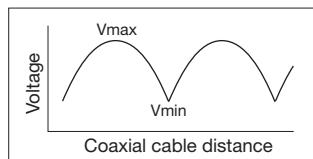


Fig. 1 Voltage Distribution Over Coaxial Cable

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	—

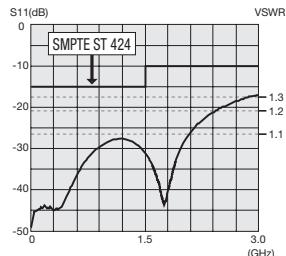
• Standard package (20pcs)

● 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

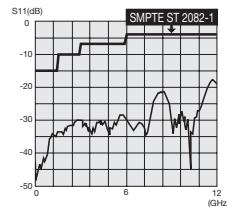
● Return loss for BCJ-D: 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz

Be sure to use Canare Crimp Tool



BCJ-JK

12G-SDI



Return loss for BCJ-JK



BCP-TK

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

75Ω BNC Termination Plugs

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

Return loss for BCP-TB: 26.4 dB @ 3 GHz

Connector Boots

■ CB0x Series

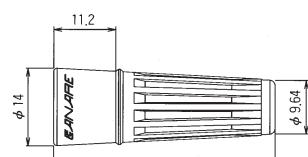
Our best selling connector boots for Canare BNC, TNC crimp plugs.

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,	D33UHD, B3F, B31F, A3, A32, A3AHD A3F, VA3	C3, C4	C3, C4
CB04	ORN, PPL, RED, YEL, WHT	B4F, A31, A4, A42, A4F, A55	C31	C31
CB05A		B53, B56, B5F, B51F, A5, A5F, A77, VA5, C5HD	C5, C5FA	C5

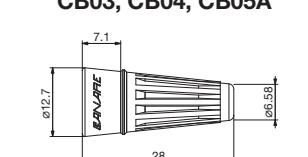
■ CB2x Series

Thinner type of CB0x series. Best fit for Canare Slim BNC, RCA, and F crimp plugs.

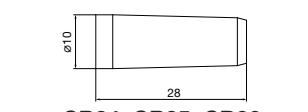
Model	Colors Available	Typical Connectors		
		MBCP-xx	RCAP-xx	FP-xx
CB24		C3F	C3A, C3F	C3, C3F
CB25	BLK, BLU, GRN, RED, YEL, WHT	C4, C4F	C3GS, C4A, C4F	C31, C4, C4F
CB26		C5F	C53, C5A, C5F	C5, C53A, C5F



CB03, CB04, CB05A



CB01, CB02



CB24, CB25, CB26

75Ω BNC Receptacles

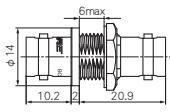
■ Jack to Jack 12G-SDI

Return Loss: 15 dB @ 12 GHz

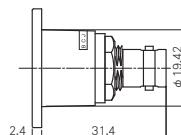
Model	Description	Flange
BCJ-JRK	Standoff	—
BCJ-JRUK		ITT XLR-F77
BCJ-JRUDK	Flush-mount	Neutrik D
BCJ-JRUDBK		Neutrik D (Black)

• Standard package (20 pcs)

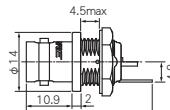
● Redesigned for 12G-SDI to minimize return loss.



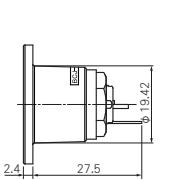
BCJ-JRK



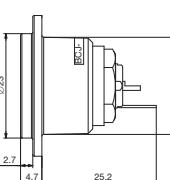
BCJ-JRUK



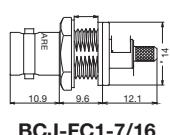
BCJ-R/1



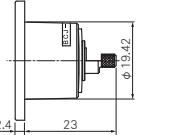
BCJ-RU



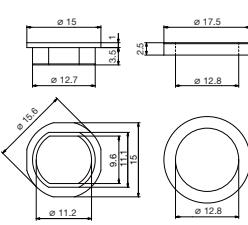
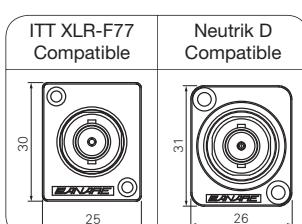
BCJ-RUD



BCJ-FC1-7/16

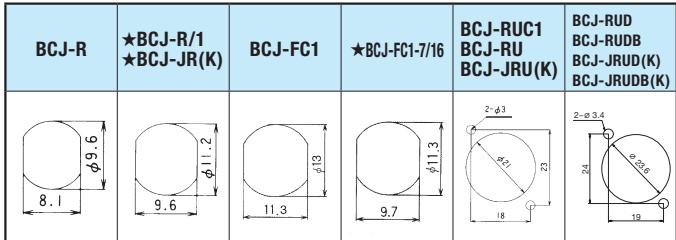


BCJ-RUC1



Panel Hole Dimensions

■ Panel Hole Dimensions



* 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-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

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	Vertical	
BCJ-FPLV-L	Right Angle, Long Neck	Horizontal	Front: Hex nut and lock washer
BCJ-FPLHA	Right Angle	Horizontal	
BCJ-FPC	Straight		
BCJ-FPC02	Straight, Low Cost		

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

Rear Mount

Model	Description	Stud Position	Panel Mount
BCJ-RPLV	Right Angle	Vertical	
BCJ-RPLH	Right Angle	Horizontal	
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)

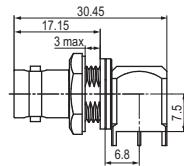
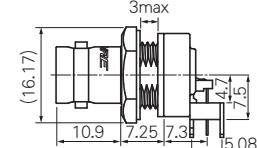
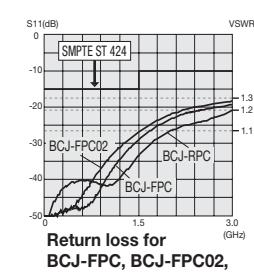
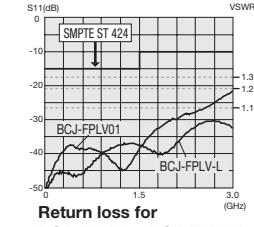
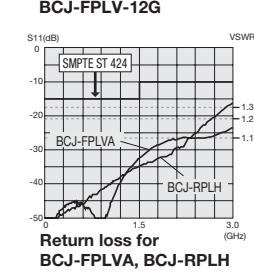
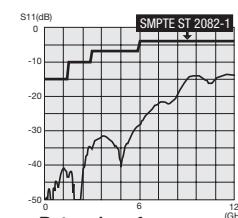
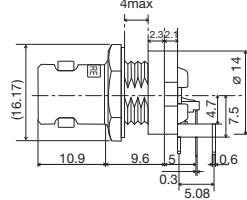
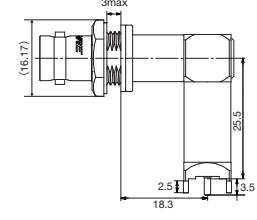
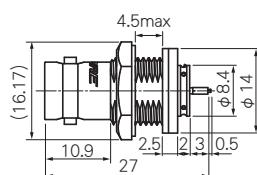
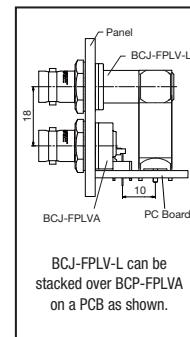
**<Panel Hole Dimensions>**

BCJ-FPLV-12G*	BCJ-FPLVA*	BCJ-FPLHA*	BCJ-FPC*	BCJ-RPC/1
9.7	9.7	11.3	11.3	11.3
11.1φ	11.1φ	11.1φ	11.1φ	11.1φ

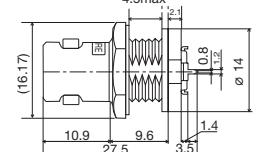
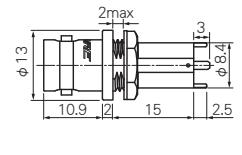
* BCP-FP series accept insulation bushing IU-7/16, and the panel hole for IU-7/16 should be adopted in this case. (see page 33)

<PC Board Hole Dimensions>

BCJ-FPLV-12G	BCJ-FPLVA BCJ-FPLV01 BCJ-FPLHA	BCJ-FPLV-L	BCJ-FPC BCJ-FPC02	BCJ-RPLV BCJ-RPLH	BCJ-RPC
t 2.0	t 2.0	t 2.0	t 2.0	t 3.0	t 1.6
10	10	9	7.62	11.3	15
0.7φ	0.7φ	0.7φ	0.7φ	1.6φ	1.4φ
0.1φ	0.1φ	0.1φ	0.1φ	0.1φ	0.1φ

**BCJ-FPLV-12G****12G-SDI****BCJ-FPLV-12G****BCJ-FPLVA****BCJ-FPLV01****BCJ-FPLV-L****BCJ-FPC**

BCJ-FPLV-L can be stacked over BCJ-FPLVA on a PCB as shown.

**BCJ-FPC02****BCJ-RPC**