# **C**onnectors

# **75** $\Omega$ BNC Connectors

#### **Applications**

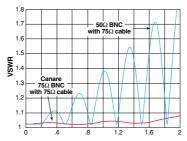
- SMPTE 259M & 292M compliant
- Serial Digital Video (SDI)
- HDTV upgrades (DTV)
- NTSC Analog
- Test equipment
- Satellite headends
- Telcom

#### **Features**

- lacktriangle True 75 $\Omega$  construction; Crimp Pin & Sleeve
- DC to 2 GHz; ≥26 dB Return Loss (≤1.1 VSWR)
- lacktriangle Mechanically mates with common 50 $\Omega$  BNC
- Elongated Body for better finger grip
- Superior cable pull strength
- Gold Plated Contact Pin 'Snap Locks' into place
- Beryllium Copper Outer Contact

Canare offers a full line of high performance MIL-C-39012 true  $75\Omega$  BNC connectors with impedance matched performance characteristics and specifications that properly address the latest generations of high bandwidth digital video equipment.

Importantly, Canare 75 $\Omega$  BNC connectors offer excellent mechanical pull strength and very low digital signal reflections; RL  $\geq$ 26dB (VSWR  $\leq$ 1.1) DC to 2GHz.



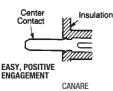
Frequency (GHz)
Influence by impedance matching and mismatching

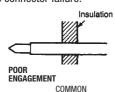
Note: Mismatch of terminating  $75\Omega$  video coax cable with  $50\Omega$  BNC connectors will result in signal degradation and reduced picture quality at today's ultra high analog and digital video transmission rates.

PTFE dielectric is designed with an exclusive air gap compensation circuit that maintains a constant  $75\Omega$  matched impedance, even if variances in contact pin crimping occur.

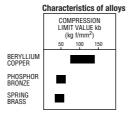
#### **Captive Contact Pin**

Canare BNC crimp pins snap and lock into place to prevent pin migration, the leading cause of most BNC connector failure.





Gold plated center crimp pin offers low contact resistance, superior mating properties and corros



Beryllium Copper outer contact is extremely resilient to constant flexing. Elongated Body design for better finger grip

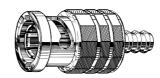
Special Nickel Plated Bell Brass remains brilliant even after many years of field service. Mechanically mate with all  $50\Omega$  type BNC connectors.

> Canare Dual Crimp BNC connectors are a more reliable and rugged assembly than quick "twist-on" style BNC plugs.



Our longer Sleeves offer a wider crimping surface area for improved cable pull strength.

Low-Priced Type (DC to 1GHz)



Same center crimp pin & crimp sleeve with BCP-C. Die-cast body made affordable price possible.



The connector on the left is a commonly used  $50\Omega$  BNC. Notice that the dielectric (white ring) is visible at the top of the outer contact.

The Canare plug on the right is a true  $75\Omega$  BNC connector. Its dielectric material is recessed... Your visual assurance that there will be proper  $75\Omega$  impedance matching between the source equipment, interconnecting cables, patchbay and load equipment. The end result: no signal reflections (VSWR) for longer cable runs and enhanced system performance.

# **75** $\Omega$ BNC Crimp Plugs

Popular 75 $\Omega$  BNC Connectors, Ideal for Digital Video and High-end Computer Graphics

#### **■** BCP-C Series (Straight Type)

	Model	Suit	able Cable	Conton Din	Cleave	Doot	Die Set
	Model	Canare	Belden (suggested)	Center Pin	Sleeve	Boot	Die Set
	BCP-C1	L-1.5C2VS, V*-1.5C	83264, 83267	Solder	BN7022	CB01	TCD-1DB
	BCP-C25	L-2.5C2V	_	BN1018A	BN7029C	CB02	TCD-35CA
	BCP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	CB02	TCD-35CA
	BCP-C31	L-3C2W	_	B11014E	BN7011	CB04	TCD-31C
*	BCP-C32	_	1506A, 1824A, 1825A, 1826A, 643948	B11016E	BN7026A	CB03	TCD-35CA
	BCP-C3B	L-3C2VS, L-3C2V, V*-3C	_	B11014E	BN7003A	CB03	TCD-35CA
	BCP-C3F	L-3CFB, LS-3CFB, V*-3CFB	_	B11015E	BN7003A	CB03	TCD-35CA
	BCP-VC3	V*-3C	_	B11014E	BN7052A	CB02	TCD-35CA
*	BCP-C42	_	1505F	B11016E	BN7011	_	TCD-31C
	BCP-C4B	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB04	TCD-451CA, TCD-4CA
	BCP-C4F	L-4CFB, LS-4CFB, V*-4CFB	1505A, 8212, 8241F, 9167, 9259, 9659	B11016E	BN7015A	CB04	TCD-451CA, TCD-4CA
*	BCP-C51	_	728A, 8281, 8281B	B11016E	BN7002	_	TCD-451CA
	BCP-C52	L-5C2W	_	B11016E	BN7014	_	TCD-451CA
*	BCP-C53A	_	1694A, 9066, 9116, 9118, 9248	B11020D	BN7046	CB05A	TCD-35CA
*	BCP-C55A	_	1695A, 89120, 87120, 633948, 9116P	B11020D	BN7045A	CB04	TCD-35CA
	BCP-C5B	L-5C2VS, L-5C2V, V*-5C	_	B11016E	BN7016	CB05A	TCD-35CA
	BCP-VC5	V*-5C	_	B11016E	BN7045A	CB05A	TCD-35CA
	BCP-C5FA	L-5CFB, LS-5CFB, V*-5CFB	_	B11020D	B75004A	CB05A	TCD-5CF, TCD-55FA
	BCP-C6HD	L-6CHD	_	BN1083A	BN7074A	_	TCD-67HD
*	BCP-C71A	_	7731A, 9064, 9292, 1617A, 9011	BN1043A	BN7021A		TCD-7CA
	BCP-C77A	LV-77S	8281F	B11016E	B75004A	CB05A	TCD-5CF, TCD-55FA
	BCP-C7FA	L-7CFB	_	BN1012B	BN7021A	_	TCD-7CA
	BCP-C7HD	L-7CHD	_	BN1082A	BN7021A	_	TCD-67HD

<sup>•</sup>Standard package (20pcs / 100pcs)

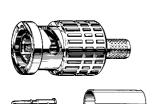
#### ■ BCP-LC Series (Right Angle Type)

Ma	ndal .	Suitable Cable		Center Pin	Sleeve	Post	Die Set
IVIO	Model	Canare	Belden (suggested)	Genter Pill	Sieeve	Boot	DIE SEL
BCP-L	_C3	L-3C2VS, L-3C2V, V*-3C	_	B11014E	BN7003A	_	TCD-35CA
BCP-L	_C3F	L-3CFB, LS-3CFB, V*-3CFB	_	B11015E	BN7003A	_	TCD-35CA
BCP-L	_C5	L-5C2VS, L-5C2V, V*-5C	_	B11016E	BN7016	_	TCD-35CA
BCP-L	_C5F	L-5CFB, LS-5CFB, V*-5CFB	_	B11020D	B75004A	_	TCD-5CF, TCD-55FA

<sup>•</sup>Standard package (20pcs)

- High performance of 1.1 or less VSWR up to 2GHz. <Fig.1> (VSWR 1.1 or less up to 1GHz for BCP-C25, BCP-C25F)
- Use of crimping to attach the connectors ensures quick, reliable installation. <Fig. 2>
- Lock mechanism used on insulation improves reliability by preventing shifting or detaching of the contact pin.
- Gold plating on the contact pin prevents deterioration, even after years of use.
- Elongated body design enables easy attachment and removal.

Be sure to use the Canare crimping tool for installing connectors on cables.



BCP-C3B



BCP-LC3

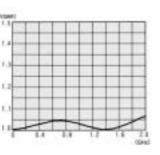


Fig. 1 VSWR for BCP-C3B

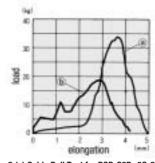


Fig. 2 (a) Cable Pull Test for BCP-C3B+3C-2V (b) Cable Pull Test for BCP-C25+2.5C-2V

 $<sup>\</sup>bigstar\mbox{Custom}$  models. Please ask us for ordering lot.

#### **75** $\Omega$ BNC Crimp Plugs (Low-Priced)

Canare is prepared to offer international prices to customers concerned with reducing product cost. These are die-cast body  $75\Omega$  BNC connectors.

#### **■** BCP-PC Series (Straight Type)

Model	Suitable Cable		Center Pin	Sleeve	Post	Die Set
Wiouei	Canare	Belden (suggested)	Center Pill	Sieeve	Boot	DIE SEL
BCP-PC3	L-3C2VS, L-3C2V, V*-3C	_	B11014E	BN7003A	CB03	TCD-35CA
BCP-PC3F	L-3CFB, LS-3CFB, V*-3CFB	_	B11015E	BN7003A	CB03	TCD-35CA
BCP-PC4	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB04	TCD-451CA, TCD-4CA
BCP-PC4F	L-4CFB, LS-4CFB, V*-4CFB	1505A, 8212, 8241F, 9167, 9259, 9659	B11016E	BN7015A	CB04	TCD-451CA, TCD-4CA
BCP-PC5	L-5C2VS, L-5C2V, V*-5C	_	B11016E	BN7016	CB05A	TCD-35CA
BCP-PC5F	L-5CFB, LS-5CFB, V*-5CFB	_	B11020D	B75004A	CB05A	TCD-35CA

<sup>•</sup>Standard package (20pcs)

- 1.1 or less VSWR up to 1GHz. <Fig. 1>
- A new design has been adopted that requires less force to crimp the sleeve
- The connector body is produced using the pressing process, which greatly lowers cost.
- Compatible with existing BCP-C series crimp tool.
- Lock mechanism used on insulation improves reliability by preventing shifting or detaching of the contact pin.
- Gold plating on the contact pin and external contact prevents deterioration, even after years of use.

Be sure to use the Canare crimping tool for installing connectors on cables.





BCP-PC3

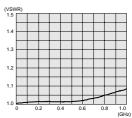


Fig. 1 VSWR for BCP-PC3

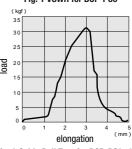


Fig. 2 Cable Pull Test for BCP-PC3+3C-2V

# **75** $\Omega$ BNC Solder Plugs

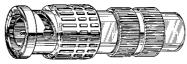
#### **■** BCP-PC Series (Straight Type)

Model	Suita	Suitable Cable		Clasus	Doot	Die Cet
Model	Canare	Belden (suggested)	Center Pin	Sleeve	Boot	Die Set
ВСР-НЗВ	L-3C2VS, L-3C2V, L-3CFB, LS-3CFB	_	_	_	_	_
BCP-H31F	L-3CFW	_	_	_	_	_
BCP-H5B	L-5C2VS, L-5C2V, L-5CFB, LS-5CFB	_	_	_	_	_
BCP-H51F	L-5CFW	_	_	_	_	_
DOD UE	L-3C2VS, L-3C2V, L-3CFB, LS-3CFB,					
BCP-H5/1	L-5C2VS, L-5C2V, L-5CFB, LS-5CFB	_	_	_	_	_

<sup>•</sup>Standard package (20pcs)

- 1.1 or less VSWR up to 1GHz. <Fig. 3>
- The tubular (ferrule) section is silver plated to make soldering easier.
- The cable stripper can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment. (Excluding BCP-C1)

Be sure to use the Canare crimping tool for installing connectors on cables.



BCP-H3B

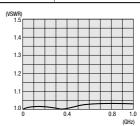


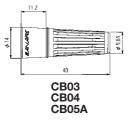
Fig. 3 VSWR for BCP-H5/1

# **Cable Boots**

Model	Color							Material				
Model	BLK	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	Material	
CB01												
CB02												
CB03											Elastomer	
CB04												
CB05A												
CB24												
CB25											Rubber (EPDM)	
CB26											(CPDIVI)	

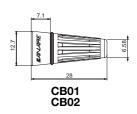
<sup>•</sup>Standard package (20pcs / 100pcs)

 Covering the connector-to-cable joint with the cable boot helps prevent cable damage at the connector sleeve stress point due to flexing and fatigue.





CB24 CB25 CB26



17 CANARE CATALOG CONNECTORS

**75** $\Omega$  BNC Connectors =

#### **75** $\Omega$ BNC Receptacles

BNC Receptacles that emphasize  $75\Omega$  impedance matching (conforms to MIL-C39012)

#### ■ Panel Mount

= 1 and mount						
Model	Description	Matching Cable				
BCJ-R	Jack to Solder Pin	_				
BCJ-R/1	Jack to Solder Cup with Ground Lug	_				
BCJ-FC1	Panel Jack	1.5C - 2V				
BCJ-FC1-7/16	i alici Jack	1.50 - 20				
BCJ-JR	Jack to Jack	_				
0. 1 1 1 (00 /100 )						

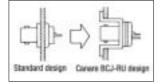
<sup>•</sup>Standard package (20pcs / 100pcs)

#### ■ Recessed Bulkhead Receptacles

Model	Description	Matching Cable
BCJ-RU	Jack to Solder Cup	_
BCJ-RUC1	Panel Jack	1.5C-2V
BCJ-JRU	Jack to Jack	_
BCJ-RUD	Jack to Solder Pin Neutrik D Type	_
BCJ-RUDB	Jack to Solder Pin Neutrik D Type (Black)	_
BCJ-JRUD	Jack to Jack Neutrik D Type	_
BCJ-JRUDB	Jack to Jack Neutrik D Type (Black)	_

<sup>•</sup>Standard package (20pcs / 100pcs)

- 1.1 or less VSWR up to 2GHz. (1.1 up to 1GHz for the Panel Jack type)
- Beryllium copper (gold plated) is used on the center contact for its superior spring characteristics.
- Center contact for the solder pin



Registered design

- connectors are solder type. The recessed flush-mount configuration is designed to prevent damage
- on the flange type connectors. • Two types of flange are available: ITT XLR-F77 and Neutrik D compati-
- ble. • The panel jack connectors are based on a space-saving configuration
- designed for use with internally hard-wired equipment.
- Cable for the panel jack type is covered by crimp sleeve on the cable connect side. Center contact is solder type.

For crimping sleeve of the panel jack types, be sure to use the Canare crimping tool

 A ground lug can be provided for the BCJ-R connector. Information is available on request.

#### **■** Panel Hole Dimensions

BCJ-R	★BCJ-R/1 ★BCJ-JR	BCJ-FC1	★BCJ-FC1-7/16	BCJ-RUC1 BCJ-RU BCJ-JRU	BCJ-RUD BCJ-RUDB BCJ-JRUD BCJ-JRUDB
8.1	9.6	11.3	9.7	2-93 (R2,5 mounting screw)	2-34

<sup>★</sup> Indicate connectors that accept isolation bushing. Mounting hole for isolation bushing IU-7/16 should be adopted.

#### **Isolation Bushing**

Model	Description
IU-7/16	ABS plastic, Color: White (standard stock). Black, Green, Red and Yellow (custom*)

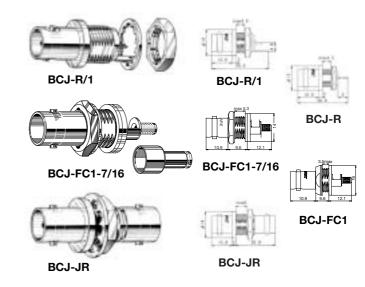
<sup>•</sup>Standard package (20pcs)

\*M0Q: 5000pcs

Used to isolate connector and panel.

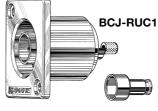
Caution: Be sure to remove the locknut and washer on the target connector when installing the isolation bushing.

Mountable panel thickness:  $1.2 \sim 1.5$ mm: BCJ-FPLVA, BCJ-FPLHA, BCJ-R/1  $1.2 \sim 3.0$ mm: BCJ-FPC, BCJ-FPC02, BCJ-JR, BCJ-FPLV01



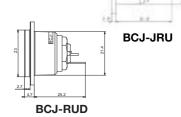


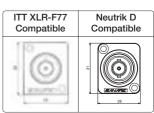




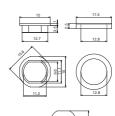














Panel Hole Dimensions

#### **75** $\Omega$ BNC PC Board Mounted Receptacles

#### **Key Features and Benefits**

- ullet True 75 $\Omega$  PC Board Mounted Receptacle
- ≤1.2 VSWR DC 2.5GHz; ≤1.1 VSWR DC 1.0GHz
- Gold Plated Beryllium Copper Center Contact
- Securely Mounts to PC Board with Chassis Support

#### **■ BCJ-BP Series**

Model	Description	Two-stud Position	Panel Mount
BCJ-BPLH	BNC Jack Right Angle Mount		Front: M2.6-6 screw
BCJ-BPLH2P	Dual BNC Jack, Right Angle Mount	Horizontal	(Extra M2.6 tap at bottom)
BCJ-BPLH3P	Triple BNC Jack, Right Angle Mount		(Extra Wiz.6 tap at bottom)
BCJ-BPC2P	Dual BNC Jack, Straight Mount	_	Front: M2.6-6 screw

\* M2.6-6 screws are not included.



BCJ-BPLH BCJ-BPLH2P BCJ-BPLH3P



**BCJ-BPLH** 



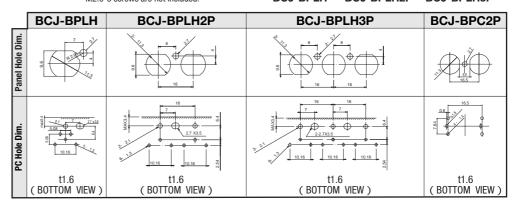
BCJ-BPLH2P



**BCJ-BPLH3P** 



BCJ-BPC2P



#### **■ BCJ-FP Series**

Model	Description	Two-stud Position	Panel Mount	
BCJ-FPLVA	BNC Jack Right Angle Mount	M P 1		
BCJ-FPLV01	Low Cost BNC Jack, Right Angle Mount	Vertical		
BCJ-FPLHA	BNC Jack Right Angle Mount	Horizontal	Front: Hex nut and	
BCJ-FPC	BNC Jack, Straight Mount		lock washer	
BCJ-FPC02	Low Cost BNC Jack, Straight Mount	_		





BCJ-FPLVA



BCJ-FPLV01 B0



**BCJ-FPLHA** 



BCJ-FPLVA



**BCJ-FPLV01** 



**BCJ-FPC** 



**BCJ-FPC02** 



**BCJ-FPC** 



**BCJ-FPC02** 

#### **■ BCJ-RP Series**

Model	Description	Two-stud Position	Panel Mount
<b>BCJ-RPLV</b>	BNC Jack Right Angle Mount	Vertical	
BCJ-RPLH	BNC Jack Right Angle Mount	Horizontal	Rear:
BCJ-RPC	BNC Jack, Straight Mount	_	Hex nut and lockwasher
BCJ-RPC/1	BNC Jack, Straight Mount		

\* Hex nut and lockwasher are included.



**BCJ-RPLV** 



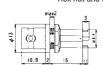
BCJ-RPLH



BCJ-RPLH



BCJ-RPC



BCJ-RPC/1



**BCJ-RPC** 



BCJ-RPC/1

	BCJ-FPLVA BCJ-FPLV01	BCJ-FPC BCJ-FPC02	BCJ-FPLHA	BCJ-RPC/1 BCJ-RPC BCJ-RPLV BCJ-RPLH
Panel Hole Dim.	9.7	96	Ø11.3	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	BCJ-FPLVA BCJ-FPLV01 BCJ-FPLHA	BCJ-FPC BCJ-FPC02	BCJ-RPLV BCJ-RPLH	BCJ-RPC
PC Hole Dim.	10.15 5.39 0 0 0 0 0	1.6 2.914	13 500 80	764 A21
=	t1.6	t1.6	t1.6	t1.6

BCJ-C4

# lacksquare 75 $\Omega$ BNC / 75 $\Omega$ N Type Connectors .

# **75** $\Omega$ BNC Jack Plug

Model	Matching Cable	Boot	Die Set
BCJ-C4	RG-59 B/U, LV-61S, Belden 8241, 8279, 88241	CB25	TCD-4CA, TCD-451CA

- •Standard package (20pcs)
- 1.1 or less VSWR up to 1.5GHz, 1.2 or less up to 2.4GHz.
- Beryllium copper (gold plated) is used on the center contact for its superior spring characteristics. (Center contact is soldered.)

Be sure to use the Canare crimping tool for installing connectors on cables.

# **75** $\Omega$ BNC Extension Adapter

Model	Description
BCJ-J	Jack to Jack

- •Standard package (20pcs / 100pcs)
- Beryllium copper is used on the center contact for its superior spring characteristics.
- 1.1 or less VSWR up to 2GHz. <Fig. 1>

# **75** $\Omega$ BNC Termination Plugs

## Designed for True 75 $\Omega$ Termination

Model Description	
BCP-PT Low-Priced 75Ω Termination (1.0GHz Type)	
BCP-TA	Standard 75Ω Termination (2.0GHz Type)
BCP-TA-CH	Standard 75 $\Omega$ Termination (2.0GHz Type) with String

- •Standard package (20pcs / 100pcs)
- Includes 1/4 watt resistance.
- 1.1 or less VSWR up to 2GHz. (Up to 1GHz for BCP-PT) <Fig. 2>

#### **BNC Dust Caps**

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

- •Standard package (20pcs / 100pcs)
- Protects unused BNC receptacles from dirt and dust.

#### **75** $\Omega$ N Type Plug

Model	Matching Cable
NCP-H8HD	L-8CHD

- •Standard package (1pc)
- Gold plating on the contact pin prevents deterioration, even after years
- 1.1 or less VSWR up to 2GHz. <Fig. 3>
- Solder type

Tools required: 17mm and 21mm wrenches

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

# $75\Omega$ N Type to BNC Adapter

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

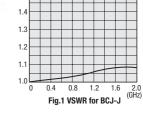
- •Standard package (1pc)
- Beryllium copper (gold plated) is used on the center contact for its superior spring characteristics.
- 1.1 or less VSWR up to 2GHz. <Fig. 4>
- Panel mountable as well. For isolation from the panel, use Canare isolation bushing IU-7/16.



BCJ-C4



**BCJ-J** 



**BCJ-J** 

(VSWR



**BCP-TA** 

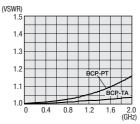


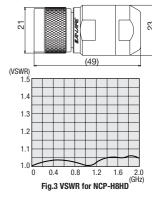
Fig.2 VSWR for BCP-PT, BCP-TA

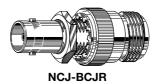


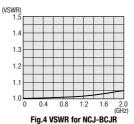
**BCJ-DC** 

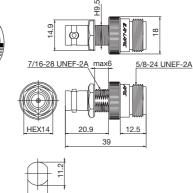


NCP-H8HD









Panel Hole Dimensions

CONNECTORS 20

#### **75** $\Omega$ 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.

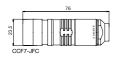
#### **Key Features and Benefits**

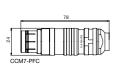
- True 75Ω, DC 1.5GHz; ≥20dB Return Loss (≤1.2 VSWR)
- Push-lock mechanism
  - no cable stress when detaching to prevent cable break
- Crimp and solder type are available
- Sturdy construction

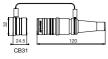
#### **CC-F Series**

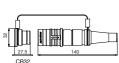
Cable compatibility meets European interconnecting requirements.

Model	Description	Sı	itable Cable	Post/Con	Tools
Model	Description	Canare	Belden (suggested)	Boot/Cap	TOOIS
CCF5-JF	Female cable mount			CB16	
CCM5-PF	Male cable mount	L-5CFTX	7783A	CB17	
CCF5-JFR	Female panel mount	L-30F1X	//osa	DCF02	_
CCM5-PFR	Male panel mount			DCM02	
CCF5-JFC	Crimp type, Female cable mount			CB31	
CCM5-PFC	Crimp type, Male cable mount	L-5CFTX	X 7783A	CB32	TC-1 + TCD-65C
CCF5-JFRC	Crimp type, Female panel mount	L-30FIX		DCF02	10-1 + 100-000
CCM5-PFRC	Crimp type, Male panel mount			DCM02	
CCF7-JFC	Crimp type, Female cable mount			CB31	
CCM7-PFC	Crimp type, Male cable mount	L-7CFTX	7784A	CB32	TC-2 + TCD-96C
CCF7-JFRC	Crimp type, Female panel mount	L-/GFIX	7704A	DCF02	10-2 + 100-960
CCM7-PFRC	Crimp type, Male panel mount			DCM02	
CCF10-JF	Female cable mount			CB18	
CCM10-PF	Male cable mount	10CFTX-SC		CB19	
CCF10-JFR	Female panel mount	10051X-50	_	DCF02	_
CCM10-PFR	Male panel mount			DCM02	]

















Panel Hole Dimensions

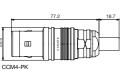
**VSWR for CCx7-F** 

#### **CC-K Series**

Cable compatibility meets American interconnecting requirements.

Madel	Description	Su	itable Cable	Doot/Con	Toolo
Model	Description	Canare	Belden (suggested)	Boot/Cap	Tools
CCF4-JK	Crimp type, Female cable mount			CB23	
CCM4-PK	Crimp type, Male cable mount	L-4CFTX	19564 19574 0967	CB22	TC-1 + TCD-316C
CCF4-JKR	Crimp type, Female panel mount	L-40FIX	1856A, 1857A, 9267	DCF02	10-1 + 100-3160
CCM4-PKR	Crimp type. Male panel mount			DCM03	



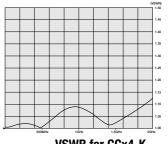








Panel Hole Dimensions



**VSWR for CCx4-K** 

# RCA Connectors / Phono Plugs -

#### **RCA Pin Connectors**

Such consumer products as CD players and DAT systems have become so functionally sophisticated that they are increasingly being used as commercial systems. Canare is providing a line of connectors specially designed for this equipment range.

#### ■ RCAP-C Series (Straight Plug, Crimp Type)

	Model	Suitable Cable		Center Pin	Cleave	Doot	Die Cet
	Wiouei	Canare	Belden (suggested)	Center Pin	Sleeve	Boot	Die Set
*	RCAP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	_	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, LS-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-451CA, TCD-4CA
	RCAP-C4F	L-4CFB, LS-4CFB, V*-4CFB	1505A, 8212, 8241F, 9167, 9259, 9659	B11016E	BN7015A	CB25	TCD-451CA, TCD-4CA
*	RCAP-C53	_	1694A, 9066, 9116, 9118, 9248	B11020D	BN7046	CB26	TCD-35CA
	RCAP-C5A	L-5C2VS, L-5C2V, V*-5C	_	B11016E	BN7016	CB26	TCD-35CA
	RCAP-C5F	L-5CFB, LS-5CFB, V*-5CFB	_	B11020D	B75004A	CB26	TCD-5CF, TCD-55FA
*	RCAP-C77	LV-77S	8281F	B11016E	B75004A		TCD-5CF, TCD-55FA

<sup>•</sup>Standard package (20pcs / 100pcs)

- The crimp design ensures fast and reliable cable connection.
- 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 the Canare crimping tool for installing connectors on cables.

#### ■ RCA Solder Plugs

Model	Description	
F-09	-09 RCA Pin Plug	
F-10	RCA Pin Plug (Long sleeve)	

- •Standard package (10pcs)
- Offer strong cable clamping that prevents severed lines.
- Suited to cables up to 6.0mmø in size.
- •Spring must be removed when attaching to L-5C2VS cables.
- •Accommodates cables up to 7.5mmø in size when spring removed.

#### RCA Recessed Bulkhead Receptacles

Model Description				
RJ-RU Jack to Solder Cup				
RJ-BCJRU RCA (F) - BNC (F)				
RJ-RUD Jack to Solder Cup, Neutrik D Type				
RJ-RUDB	Jack to Solder Cup, Neutrik D Type (Black)			
RJ-BCJRUD	RCA (F) - BNC (F), Neutrik D Type			
RJ-BCJRUDB	RCA (F) - BNC (F), Neutrik D Type (Black)			

- •Standard package (20pcs / 100pcs)
- Two types of flange are available: ITT XLR-F77 and Neutrik D compati-
- VSWR is 1.1 or less up to 50MHz, enabling their use with HDTV and computer graphics video signals.
- Color-coded insulation enables users to easily distinguish between the R, G and B elements. Users can choose as required from five colors, including red, green, blue, yellow and white.

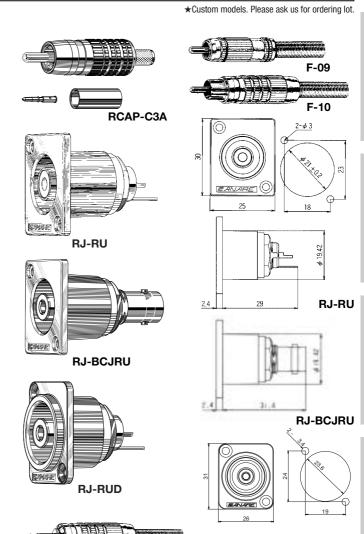
#### **Phono Plugs**

Model	Description	
F-11	Mini Phono TS	
F-12	Mini Phono TRS	
F-15	1/4" TS Phono	
F-16	1/4" TRS Phono	

<sup>•</sup>Standard package (10pcs)

Robustly Constructed Phone Plugs Designed For Use With Electronic **Musical Instruments** 

- Offer strong cable clamping that prevents severed lines.
- Suited to cables up to 6.0mmø in size.
- •Accommodates cables up to 7.5mmø in size when spring removed.



F-12

**RJ-RUD** 

# F Connectors.

#### **F** Connectors

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

#### ■ FP-C Series (Straight Plug, Crimp Type)

Model	Suitable Cable		0t Di	01	D4	D: 0.1	
Model	Canare	Belden (suggested)	Center Pin	Sleeve	Boot	Die Set	
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, LS-3CFB, V*-3CFB	_	BN1003B	BN7003A	CB24	TCD-35CA	
FP-C4	LV-61S	8241, 8279, RG-59B/U	BN1003B	BN7015A	CB25	TCD-451CA, TCD-4CA	
FP-C4F	L-4CFB, LS-4CFB, V*-4CFB	1505A, 8212, 8241F, 9167, 9259, 9659	BN1004B	BN7015A	CB25	TCD-451CA, TCD-4CA	
FP-C5	L-5C2VS, L-5C2V, V*-5C	_	BN1004B	BN7016	CB26	TCD-35CA	
FP-C52	L-5C2W	_	BN1004B	BN7014	_	TCD-451CA	
FP-C53A	_	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, LS-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	

<sup>•</sup>Standard package (20pcs / 100pcs)

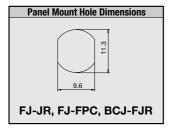
- Lock mechanism improves reliability by preventing shifting or detaching of the center pin.
- The tools and cable stripper can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment.
- VSWR of 1.1 or less up to 2GHz. Compatible with broadcast satellite (BS) and communications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

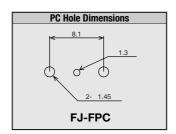
Be sure to use the Canare crimping tool for installing connectors on cables.

#### **■** F Panel Mount Receptacles

	•
Model	Description
FJ-JR	Jack to Jack
FJ-FPC	PC Board Straight Mount
BCJ-FJR	BNC Jack to F Jack

- •Standard package (20pcs / 100pcs)
- VSWR of 1.1 or less up to 2GHz. Compatible with broadcast satellite (BS) and communications satellite (CS) signals. <Fig. 1>
- For isolation from the panel, use isolation bushing IU-7/16. (Panel thickness: 1.2 ~ 3.0mm)





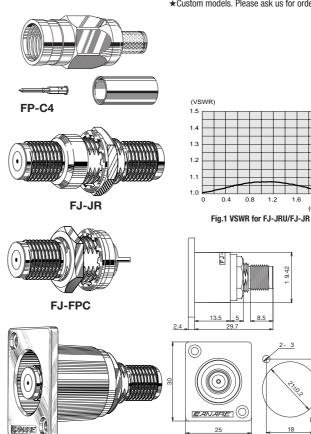
#### **■** F Recessed Bulkhead Receptacles

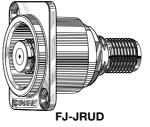
Model	Description
FJ-JRU	Jack to Jack
FJ-JRUD	Jack to Jack, Neutrik D Type
FJ-JRUDB	Jack to Jack, Neutrik D Type (Black)

<sup>•</sup>Standard package (20pcs / 100pcs)

• Two types of fiange are available: ITT XLR F77 and Neutrik D compatible.

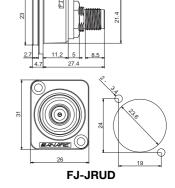






FJ-JRU





FJ-JRU

**BCJ-FJR** 

# **75** $\Omega$ Multi-Pin Coaxial Connectors .

#### **75** $\Omega$ Multi-Pin Coax Connectors

Single connector handles load of up to five 75 $\Omega$  coaxial connectors.

Model	Description	Matching Cable
MCM-V5C3	Plug	V5-3C
MCF-V5C3	Receptacle	V5-3C, L-3C2V, 3C-2V

Model	Description	Matching Connector	
DCM01	Dust Cap	MCM-V5C3	
DCF01	υίδι Θάμ	MCF-V5C3	

 Crimping is used for its speed and reliability as the method for installing connectors on the cables.

Be sure to use the Canare crimping tool for installing connectors on cables.

Replacement unit also available. MCM-V5C3: BN9078 MCF-V5C3: BN9079

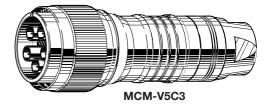


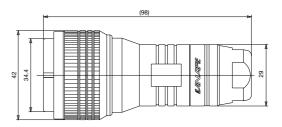
Replacement Unit BN9078



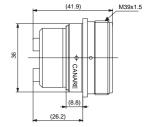
Replacement Unit BN9079

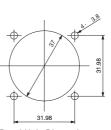
Item	Specifications
Connection	Screw type
Tools	Wrenches 24mm, 27mm, TC-1 crimper, TCD-35CA die
Characteristic Impedance	Unbalanced 75 $\Omega$
Insulation resistance	DC500V, 1000M $\Omega$ or more
Withstand voltage	AC1500V 1min. ( between conductors )
Contact resistance	10m $\Omega$ or less
Insertion loss	0.3dB or less ( DC~1.5GHz )
VSWR	1.2 or less ( DC~1.5GHz )
Cable connecting force	196N ( 20kgf ) or more ( each connector unit )
Repetition of operation	500 times
Working temperature	-40°C~+65°C
Working humidity	~90%

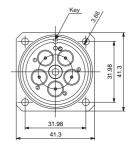












Panel Hole Dimensions (Mounting screw M3 x 4 pcs)

# FAQ

- Q Does it matter in which direction crimp sleeves are attached?
- A For BCP-C3B—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-C5FA-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).

- ulameter flore).
- Q What should be done with the tape on aluminum tape—wrapped coaxial cables?
   A For coaxial cables with lightly adhered removable aluminum tape, peel back the

tape to the root of the braid.

For coaxial cables with strongly adhered unremovable aluminum tape, simply make sure to remove any burrs or other fine

strands of tape in the area up to the insulation cut, since these could cause shorts.

- 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?
- ${\bf A}$  The central contact is pointed in conformance with the JIS standard for  $50\Omega$  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?
- ${\bf A}~$  The value varies depending on the connector, but for BNC plugs the value is approximately 0.1dB per plug (DC–2GHz).

#### **50** $\Omega$ BNC Connectors

#### **50** $\Omega$ BNC Crimp Plugs

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

#### **■** BP-C Series (Straight Type)

Model	Matching Cable	Boot	Die Set (Model: TCD-***)		
			55FA	35D	3151D
BP-C3	L-3D2V, 3D-2V	CB03			
BP-C31	L-3D2W, 3D-2W	CB04			
BP-C4	RG-58C/U, RG-58A/U	CB03			
BP-C5	L-5D2V, 5D-2V	CB05A			
BP-C5FA	L-5DFB, 5D-FB	CB05A			
BP-C51	L-5D2W, 5D-2W	_			

<sup>•</sup>Standard package (20pcs / 100pcs)

#### ■ BP-LC Series (Right Angle Type)

Model	Matching Cable	Die Set
BP-LC31	L-3D2W, 3D-2W	TCD-3151D
BP-LC51	L-5D2W, 5D-2W	160-31310

<sup>•</sup>Standard package (20pcs)

- 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 the Canare crimping tool for installing connectors on cables.

# BP-C5

(VSW/R)
1.5
1.4
1.3
1.2
1.1
1.0
2.0
4.0
(GHz)
Fig.1 VSWR for BP-C31

BJ-J

**50** $\Omega$  BNC Receptacles

#### **■** Panel Mount

Model	Description	
BJ-JR	Jack to Jack	

•Standard package (20pcs)

Custom model. Please ask us for ordering lot.

• Mounting hole size is same as that for the hard-wired BCJ-R/1 connector.

#### ■ Recessed Bulkhead Receptacles

Model	Description
BJ-JRU	Jack to Jack
BJ-JRUD	Jack to Jack Neutrik D Type
BJ-JRUDB	Jack to Jack Neutrik D Type (Black)

•Standard package (20pcs)

Custom model. Please ask us for ordering lot.

- Recessed flush mount panel jack design effectively protects the housed connector. <P.13 Fig.1>
- Two types of flange are available: ITT XLR-F77 and Neutrik D compatible.

# **50** $\Omega$ BNC Extension Adapter

Model	Description
BJ-J	Jack to Jack

•Standard package (20pcs)

Custom model. Please ask us for ordering lot.

VSWR of 1.1 or less up to 4GHz.

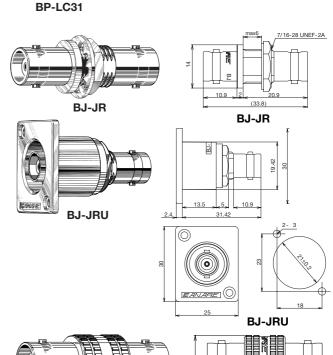


Fig.2 VSWR for BJ-J

BJ-J

# $50\Omega$ TNC / $50\Omega$ N / $50\Omega$ SMA Connectors .

#### **50** $\Omega$ TNC Crimp Plugs

Ideal for wired and/or wireless telecommunication infrastructure.

#### **■** TNP-C Series (Straight Type)

Model	Matching 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	TCD-35D	
TNP-C5	L-5D2V, 5D-2V	CB05A		
TNP-C51	L-5D2W, 5D-2W		TCD-3151D	

<sup>•</sup>Standard package (20pcs)

#### ■ TNP-LC Series (Right Angle Type)

Model	Matching Cable	Die Set	
TNP-LC31	L-3D2W, 3D-2W	TOD 0151D	
TNP-LC51	L-5D2W, 5D-2W	TCD-3151D	

<sup>•</sup>Standard package (20pcs)

- VSWR of 1.1 or less up to 2GHz, 1.2 or less up to 4GHz. <Fig. 1>
- Use of crimping to attach the connectors ensures quick, reliable installation.
- Crimping tool can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment.
- Elongated body design for straight type enables easy attachment and removal.

Be sure to use the Canare crimping tool for installing connectors on cables.

# $50\Omega$ N Crimp Plugs

This is a coaxial connector used for transmission antennas.

#### ■ NP-C Series (Straight Type)

Model	Matching Cable	Boot	Die Set
NP-C31	L-3D2W, 3D-2W	CB04	TCD-3151D
NP-C51	L-5D2W, 5D-2W	_	

<sup>•</sup>Standard package (20pcs)

#### ■ NP-LC Series (Right Angle Type)

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

<sup>•</sup>Standard package (20pcs)

- High-performance VSWR of 1.1 or less up to 2GHz, 1.2 or less up to 4GHz.
- Lock mechanism used on insulation prevents shifting or detaching of the contact pins.
- Use of crimping to attach the connectors ensures quick, reliable installation.

Be sure to use the Canare crimping tool for installing connectors on cables.

## $50\Omega$ SMA Crimp Plugs

This is a miniature coaxial connector designed for use in the compact, high-density integration devices used in transmission and measuring systems.

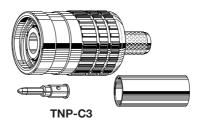
#### ■ SMAP-C Series (Straight Type)

Model	Matching Cable	Die Set	
SMAP-C1	1.5D-QEW	TCD-1DB	
SMAP-C31A	L-3D2W, 3D-2W	TCD-3151D	
SMAP-C51	L-5D2W, 5D-2W	160-31510	

<sup>•</sup>Standard package (20pcs)

- Center contact for SMAP-C1 is of solder type.
- VSWR of 1.1 or less up to 2GHz, 1.2 or less up to 4GHz. (For SMAP-C1, VSWR is 1.2 or less up to 2GHz.)

Be sure to use the Canare crimping tool for installing connectors on cables.



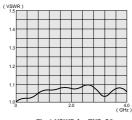
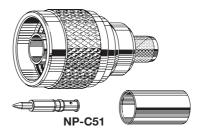
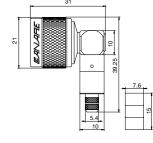


Fig.1 VSWR for TNP-C3







NP-LC31



