## BNCseries <br> RFCo-AXIAL CONNECTORS

## Overview

The BNC series are most widely used as $50 \Omega$ coaxial connectors, and compact size, light weight, and quick mounting and dismounting (bayonet lock coupling). Suitable for coaxial cables (RG-55.58/U) with a finished outside diameter of $\phi 3-\phi 8$.

## Applicable standards

Defense Agency (NDS XC 6103, DSP C 6202)
Japanese Industrial Standards (JIS C 5412)
NTT (Model 2095 3C connector)
*Meets MIL Specifications. (See Products Meeting MIL Specifications Index Table, pages 220-221.)

## Electrical Specifications

| Item | Standard |
| :--- | :--- |
| Characteristic impedance | $50 \Omega\left({ }^{*} 1\right)$ |
| Withstand voltage | $1,500 \mathrm{Vr} . \mathrm{m} . \mathrm{s}$. for 1 min. |
| Insulation resistance | $5,000 \mathrm{M} \Omega$ or more at 500 VDC |
| Contact resistance | $3 \mathrm{~m} \Omega$ or less at 1 ADC |
| Applicable frequency range | $\mathrm{DC}-4 \mathrm{GHz}$ |
| Voltage standing wave | 1.2 or less (DC-2GHz) |

(*1) Not different in electrical specifications from the $50 \Omega$ cable when connected to the $75 \Omega$ coaxial cable ( $3 \mathrm{C}-2 \mathrm{~V}$ ) for use at low fraquencies (DC-200MHz).

## Main Materials/Finish

| Part | Material | Finish(*2) |
| :--- | :--- | :--- |
| Armor(shell) | Brass | Silver plated, Nickel-plated |
| Male terminal | Brass | Silver plated, Gold-plated |
| Female terminal | Beryllium copper | Silver plated, Gold-plated |
| Insulation | Tetraflouride resin | - |
| Gasket | Silicon rubber | - |

(*2) Surface treatment differs according to the product number unit. For details, see the BNC Connector List.

## BNCseries RFco-axial connectors

| Applicable cable | Part No. | HRS No. | Dimension |  |  | Shape |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\phi$ D | $\phi d$ | 1 |  |
| RG-55/U, 58/U | UG-88/U(40) | 302-0001-0-40 | 5.4 | 11.1 | 26.5 | Fig. 1 |
|  | UG-88D/U(40) | 302-0070-3-40 | 5.6 | 12.7 | 28.8 | Fig. 1 |
|  | 3CA-P2(40) | 302-0203-5-40 | 5.6 | 13.7 | 29.5 | Fig. 1 |
| RG-59/U, 62/U | UG-260/U(40) | 302-0002-3-40 | 6.6 | 11.1 | 26.0 | Fig. 1 |
| RG-188A/U | BNC-P-188A/U(40) | 302-0216-7-40 | 3.0 | 8.0 | 25.0 | Fig. 4 |
| RG-196A/U | BNC-P-196/U(40) | 302-0214-1-40 | 2.3 | 5.0 | 27.3 | Fig. 6 |
| 5D-2W | BNC-P-5DW-1(40) | 302-0189-6-40 | 8.5 | 14.0 | 35.0 | Fig. 3 |
| 5D-2W, 5C-2W | BNC-P-5DW-SA(40) | 302-0217-0-40 | 8.7 | 15.0 | 33.7 | Fig. 2 |
| 5D-2V | BNC-P-5DV(40) | 302-0132-9-40 | 7.8 | 15.0 | 31.0 | Fig. 1 |
| 5D-2V, 5C-2V | BNC-P-5DV-SA(40) | 302-0218-2-40 | 8.0 | 15.0 | 33.7 | Fig. 2 |
| 3C-2Z | $3 C Z-P(40)$ | 302-0215-4-40 | 6.5 | 13.7 | 29.5 | Fig. 1 |
| 3C-2T | 3CT-P(40) | 302-0210-0-40 | 8.0 | 14.2 | 29.7 | Fig. 1 |
|  | 3CT-P-1/40) | 302-0208-9-40 | 8.4 | 14.0 | 30.0 | Fig. 3 |
|  | 3CT-P3(40) | 302-0270-2-40 | 8.4 | 14.0 | 30.0 | Fig. 3 |
| 3C-2W | 3DW-P(40) | 302-0209-1-40 | 7.1 | 14.2 | 29.7 | Fig. 1 |
| $3 \mathrm{D}-2 \mathrm{~V}, 3 \mathrm{C}-2 \mathrm{~V}$ | BNC-P-3DV-SA(40) | 302-0219-5-40 | 6.3 | 15.0 | 33.7 | Fig. 2 |
| 3C-2V | 3CV-P2(40) | 302-0202-2-40 | 6.3 | 13.7 | 29.5 | Fig. 1 |
|  | BNC-P-3(40) | 302-0030-9-40 | 6.4 | 11.1 | 26.5 | Fig. 1 |
|  | 3CV-P3(40) | 302-0269-3-40 | 6.8 | 14.0 | 30.0 | Fig. 3 |
| 1.5D-2W, 1.5C-2W | BNC-P-1.5WCR(40) | 302-0295-3-40 | 1.8 | 10.0 | 28.1 | Fig. 5 |
| 1.5D-2W | BNC-P-1.5W(40) | 302-0299-4-40 | 3.9 | 8.0 | 25.0 | Fig. 4 |
| 1.5D-2V, $1.5 \mathrm{C}-2 \mathrm{~V}$ | BNC-P-1.5CR(40) | 302-0294-0-40 | 1.8 | 10.0 | 28.1 | Fig. 5 |
| 1.50-2V | BNC-P-1.5(40) | 302-0257-4-40 | 3.5 | 8.0 | 25.0 | Fig. 4 |



Fig. 1
Fig. 2


Fig. 3


Fig. 4


Fig. 5


Fig. 6

## BNCseries RFCO-AXIAL CONNECTORS

## L-shaped Plug

| Applicable cable | Part No. | HRS No. | Dimension |  |  |  | Shape |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\phi \mathrm{D}$ | $\phi \mathrm{d}$ | W1 | W2 |  |
| BG-55/U, 58/U | UG-913/U(42) | 302-0043-0-42 | 5.4 | 12.7 | 11.1 | 11.1 | Fig. 7 |
| RG-59/U, 62/U | BNC-LP-59/U(40) | 302-0075-7-40 | 6.6 | 12.7 | 11.1 | 11.1 | Fig. 7 |
| 3C-2W | 3CW-PL(40) | 302-0158-2-40 | 7.1 | 14.2 | 13.0 | 13.0 | Fig. 8 |
| $3 \mathrm{C}-2 \mathrm{~V}$ | 3CV-PL(40) | 302-0157-0-40 | 6.3 | 13.7 | 12.0 | 12.0 | Fig. 8 |



Fig. 7


Fig. 8

## Jack

| Applicable cable | Part No. | HRS No. | Dimension |  |  |  |  | Shape |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\phi \mathrm{D}$ | $\phi \mathrm{d}$ | W1 | W2 | L |  |
| RG-55/U, 58/U | UG-89/U(40) | 302-0034-0-40 | 5.4 | 11.1 | 9.5 | 12.7 | 28.7 | Fig. 9 |
| RG-59/U, 62/U | UG-261/U(40) | 302-0035-2-40 | 6.6 | 11.1 | 9.5 | 12.7 | 30.0 | Fig. 9 |
| 3C-2V | 3CV-J(40) | 302-0006-4-40 | 6.3 | 11.1 | 9.5 | 11.5 | 28.7 | Fig. 9 |
| 1.50-2W, 1.5C-2W | BNC-J-1.5WCR(40) | 302-0297-9-40 | 1.8 | - | 8.0 | 13.0 | 31.0 | Fig. 10 |
| 1.5D-2V, $1.5 \mathrm{C}-2 \mathrm{~V}$ | BNC-J-1.5CR(40) | 302-0296-6-40 | 1.8 | - | 8.0 | 13.0 | 31.0 | Fig. 10 |



Fig. 9


Fig. 10

## BNCseries RFCo-AXIAL CONNECTORS

## Panel Jack

| Applicable cable | Part No. | HRS No. | Dimension |  |  |  |  |  |  |  | Shape | Mounting <br> hole dimensions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\phi \mathrm{D}$ | $\phi \mathrm{d}$ | L | $\ell$ | $\square \mathrm{P}$ | $\square \mathrm{l}$ | G | W |  |  |
| RG-55/U, 58/U | UG-291/U(40) | 302-0036-5-40 | 5.4 | 11.1 | 28.2 | 18.1 | 12.7 | 17.5 | $\begin{gathered} \text { M2.6 } \\ \times 0.45 \end{gathered}$ | 9.5 | Fig. 11 | 1-1 |
|  | 3CA-PJ2(40) | 302-0205-0-40 | 5.4 | 11.1 | 28.7 | 18.1 | 12.7 | 17.5 | $\phi 3$ | 9.5 | Fig. 11 | 1-2 |
| RG-59/U, 62/U | UG262/U(40) | 302-0007-7-40 | 6.6 | 11.1 | 28.4 | 18.1 | 12.7 | 17.5 | $\begin{aligned} & \text { M2. } 6 \\ & \times 0.45 \end{aligned}$ | 9.5 | Fig. 11 | 1-1 |
| RG-188A/U | BNC-PJ-188/U(40) | 302-0230-8-40 | 3.0 | 9.0 | 26.8 | 18.1 | 12.7 | 17.5 | M2.6 <br> $\times 0.45$ | 7.0 | Fig. 11 | 1-3 |
| RG-196A/U | BNC-PJ-196/U(40) | 302-0194-6-40 | 2.3 | 5.0 | 28.0 | 18.1 | 12.7 | 17.5 | $\begin{aligned} & M 2.6 \\ & \times 0,45 \end{aligned}$ | 4.0 | Fig. 11 | 1-4 |
| 3C-2W | 3CW-PJ (40) | 302-0139-8-40 | 7.2 | 14.0 | 31.4 | 18.1 | 12.7 | 17.5 | \$3 | 13.0 | Fig. 11 | 1-6 |
| $3 \mathrm{C}-2 \mathrm{~V}$ | 3CW-PJ2(40) | 302-0204-8-40 | 6.3 | 11.1 | 28.7 | 18.1 | 12.7 | 17.5 | ¢ 3 | 9.5 | Fig. 11 | 1-2 |
| $2.50-2 \mathrm{~V}$ | BNC-PJ-1.5DV(40) | 302-0238-0-40 | 4.7 | 11.1 | 28.7 | 18.1 | 12.7 | 17.5 | $\phi 3$ | 9.5 | Fig. 11 | 1-2 |
| 1.5D-2W | BNC-PJ-1.5(40) | 302-0228-6-40 | 4.5 | 9.5 | 26.8 | 18.1 | 12.7 | 17.5 | $\begin{aligned} & \text { M2.6 } \\ & \times 0.45 \end{aligned}$ | 7.0 | Fig. 11 | 1.7 |
|  | BNC-PJ-1.5W-1(40) | 302-0260-9-40 | 4.5 | 9.5 | 26.8 | 20.1 | 12.7 | 17.5 | \$ 2.9 | 7.0 | Fig. 11 | $1-8$ |
|  | BNC-PJ-1.5W-2(40) | 302-0282-1-40 | 4.5 | 9.5 | 26.8 | 20.1 | 12.7 | 17.5 | $\mathrm{M2.6} \mathrm{\times 0.45}$ | 7.0 | Fig. 11 | 1-9 |
| 1.5D-2V | BNC-PJ-1.5DV-1(40) | 302-0285-0-40 | 3.4 | 9.5 | 26.8 | 18.1 | 12.7 | 17.5 | $\phi 3$ | 7.0 | Fig. 11 | 1-8 |



Fig. 11 (reference)


Fig. 12 (reference)

| Applicable cable | Part No. | HRS No. | Dimension |  |  |  |  |  | Shape | Mounting <br> hole <br> dimensions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\phi \mathrm{D}$ | $\phi \mathrm{d}$ | L | $\ell$ | W1 | W2 |  |  |
| RG-55/U, 58/U | BNC-PJ-58(40) | 302-0108-4-40 | 5.4 | 1/2-28NEF-2A | 28.5 | 16.9 | 9.5 | 17.0 | Fig. 13 | 4-1 |
| 1.50-2W | BNC-BPJ-1.5W(40) | 302-0284-7-40 | 4.5 | 3/8-32NEF-2A | 26.8 | 12.8 | 7.0 | 11.0 | Fig. 15 | 3-3 |
|  | BNC-BPJ-1.5W-1(40) | 302-0289-0-40 | 4.5 | 3/8-32NEF-2A | 26.8 | 15.2 | 7.0 | 12.7 | Fig. 14 | 2-1 |
| 1.5D-2V | BNC-BPJ-1.5-1(40) | 302-0252-0-40 | 3.5 | 3/8-32NEF-2A | 26.8 | 15.2 | 7.0 | 12.7 | Fig. 14 | 2-1 |



Fig. 13



Fig. 14

## BNCseries RFCo-axial connectors

## L-shaped Jack

| Applicable cable | Part No. | HRS No. | Dimension |  |  |  |  |  |  | $\begin{array}{\|l} \left\lvert\, \begin{array}{l} \text { Mounting } \\ \text { hole } \\ \text { dimensions } \end{array}\right. \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\phi \mathrm{D}$ | $\phi \mathrm{d}$ | L | $\ell 1$ | $\ell 2$ | W1 | W2 |  |
| 1.5D-2V | BNC-LPJ-1.5(40) | 302-0255-9-40 | 3.5 | 3/8-32NEF-2A | 33.3 | 21.7 | 14.0 | 7.0 | 12.7 | 2-1 |



Fig. 16

## BNCseries RFCo-Axial connectors

Receptacles


| Part No. | HRS No. | Remarks | Mountinghole |
| :---: | :---: | :---: | :---: |
| imensions |  |  |  |
| BNC-LR(40) | $302-0020-5-40$ |  | $1-11$ |



Fig. 20

| Part No. | HRS No. | $\phi \mathrm{D}$ | L | $\imath$ | W | Panel mount |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| type | Shape | Mountinghote <br> dimensions |  |  |  |  |  |  |
| UG-604/U(40) | $302-0016-8-40$ | 14.5 | 26.3 | 13.7 | 12.7 | 2.8 | Fig.25 | $3-1$ |
| UG-625/U(40) | $302-0017-0-40$ | 12.7 | 26.3 | 12.7 | 12.7 | 4 | Fig.25 | $2-3$ |
| UG-625/U-4(40) | $302-0221-7-40$ | 12.7 | 26.3 | 12.7 | 12.7 | 4 | Fig.23 | $2-3$ |
| UG-625/U-10(40) | $302-0253-3-40$ | 12.7 | 21.9 | 12.7 | - | 1.3 | Fig.24 | $3-2$ |
| UG-625/U-11A(40) | $302-0274-3-40$ | 12.7 | 24.2 | 12.7 | 12.7 | 4 | Fig.25 | $2-4$ |
| UG-657/U(40) | $302-0012-7-40$ | 14.5 | 32.6 | 15.2 | 12.7 | 5.6 | Fig.25 | $3-3$ |
| UG-657/U-E(40) | $302-0080-7-40$ | 14.5 | 32.6 | 15.2 | 12.7 | 5.6 | Fig.23 | $3-3$ |
| UG-1094/U(40) | $302-0178-0-40$ | 12.7 | 27.0 | 11.9 | 12.7 | 4 | Fig.25 | $2-4$ |




Fig. 23


Fig. 24

## BNCseries RFCO-AXIAL CONNECTORS

| Part No. | HRS No. | Shape | Mounting hole <br> dimensions |
| :--- | :---: | :---: | :---: |
| BNC-FBR(41) | $302-0268-0-41$ | Fig. 27 | 2.3 |
| BNC-FBR-W(40) | $302-0279-7-40$ | Fig.29 | - |



Outside-insulating connector


Fig. 27


Washer mounted on BNC-FBR(01)
Fig. 29 shown in Fig.28, to connect the panel to the connector external conductor.

## Plug receptacles

| Part No. | HRS No. | Mounting hole <br> dimensions |
| :---: | :---: | :---: |
| BNC-BPR-3(40) | $302-0249-6-40$ | $2-1$ |



Fig. 30

# BNCseries RFCO-AXIAL CONNECTORS 

## Printed-circuit-board mounting type

| Part No. | HRS No. | Shape | L | $\ell 1$ | $\ell 2$ | Mounting hole |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BNC-R-PC(40) | $302-0241-4-40$ | Fig.31 | 23.1 | 18.1 | 5.0 | $6-1$ |
| BNC-R-PC-2(40) | $302-0243-0-40$ | Fig.32 | 20.4 | 17.1 | 3.3 | $7-2$ |
| BNC-R-PC-7(40) | $302-0280-6-40$ | Fig. 31 | 23.1 | 20.64 | 2.46 | $6-1$ |


| Part No. | HRS No. | Shape | Mounting hole |
| :---: | :---: | :---: | :---: |
| dimensions |  |  |  |
| BNC-LR-PC(40) | $302-0242-7-40$ | Fig.33 | $6-1$ |
| BNC-LR-PC-1(40) | $302-0262-4-40$ | Fig.34 | $7-1$ |
| BNC-LR-PC-3(40) | $302-0276-9-40$ | Fig.35 | $6-1$ |



Fig. 31


Fig. 32


Fig. 33


Fig. 34


Fig. 35

## Lug terminal

| Part No. | HRS No. | Remrks |
| :---: | :---: | :---: |
| BNC-EL | $302-0079-8$ | Earth Lug |



Fig. 36

## BNCseries RFCO-AXIAL CONNECTORS

Adapters

| Part No. | HRS No. | Shape |
| :---: | :---: | :---: |
| BNC-A-JJ(40) | $302-0039-3-40$ | Fig.37 |
| BNC-A-JJ-1(40) | $302-0050-6-40$ | Fig. 38 |


| Part No. | HRS No. | L | $\ell$ | d | Shape |
| :--- | :---: | :---: | :---: | :---: | :---: |
| BNC-PA-JJ(40) | $302-0052-1-40$ | 34 | 15.85 | $\phi 3$ | Fig.39 |
| UG-414/U(40) | $302-0040-2-40$ | 32.54 | 17.6 | M2.6X0.45 | Fig.39 |



Fig. 37


Fig. 39
Fig. 38


Fig. 40

| Part No. | HRS No. | Remarks |
| :---: | :---: | :---: |
| UG-306/U(40) | $302-0023-3-40$ | LA-PJ |



| Part No. | HRS No. | Remarks |
| :---: | :---: | :---: |
| BNC-TA-JJJ(40) | $302-0024-6-40$ |  |

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| Part No. | HRS No. | L | Remarks |
| :---: | :---: | :---: | :---: |
| BNC-UPA(40) | $302-0167-3-40$ | 35 | U Link |



Fig. 44

BNCseries RFco-axial connectors


Fig. 46

| Part No. | HRS No. | Remarks |
| :---: | :---: | :---: |
| JCW-159/U(40) | $302-0026-1-40$ | Short Plug |



Fig. 47

## BNCseries RFCO-AXIAL CONNECTORS

## Model BNC Connector List

| Type | Part No. | HRS No. | Applicable cable | Surface treatment |  |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Armor |  | Center contact |  |  |
|  |  |  |  | Silver | Nickel | Silver | Gold |  |
| Straight plug | UG-88/U(40) | 302-0001-0-40 | RG-55/U, 58/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | UG-88D/U 40 ) | 302-0070-3-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CA-P2(40) | 302-0203-5-40 |  | 0 |  | $\bigcirc$ |  |  |
|  | UG-260/U(40) | 302-0002-3-40 | RG-59/U, 62/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-P-188A/U(40) | 302-0216-7-40 | RG-188A/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-P-196/U(40) | 302-0214-1-40 | RG-196A/U | $\bigcirc$ |  |  | $\bigcirc$ |  |
|  | BNC-P-5DV-SA(40) | 302-0218-2-40 | 5D-2V, 5C-2V | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-P-5DW-1(40) | 302-0189-6-40 | 5D-2W | 0 |  | 0 |  |  |
|  | BNC-P-5DW-SA(40) | 302-0217-0-40 | 5D-2W, 5C-2W | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-P-3(40) | 302-0030-9-40 | $3 \mathrm{C}-2 \mathrm{~V}$ | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-P-3DV-SA(40) | 302-0219-5-40 | 3D-2V, 3C-2V | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CV-P2(40) | 302-0202-2-40 | $3 \mathrm{C}-2 \mathrm{~V}$ | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CV-P3(40) | 302-0269-3-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-P-1.5WCR(40) | 302-0295-3-40 | 1.5D-2W, 1.5C-2W |  | 0 | $\bigcirc$ |  |  |
|  | BNC-P-1.5(40) | 302-0257-4-40 | 1.5D-2V |  | 0 | $\bigcirc$ |  |  |
|  | BNC-P-1.5W(40) | 302-0299-4-40 | 1.5D-2W |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-P-1.5CR(40) | 302-0294-0-40 | 1.5D-2V, $1.5 \mathrm{C}-2 \mathrm{~V}$ |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | 3CZ-P(40) | 302-0215-4-40 | 3C-2Z | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CT-P(40) | 302-0210-0-40 | 3C-2T | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CT-P-1(40) | 302-0208-9-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3СT-P3(40) | 302-0270-2-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CW-P(40) | 302-0209-1-40 | 3C-2W | $\bigcirc$ |  | $\bigcirc$ |  |  |

## ENceserses <br> RFCO-AXIAL CONNECTORS

| Type | Part No. | HRS No. | Applicable cable | Surface treatment |  |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Armor |  | Center contact |  |  |
|  |  |  |  | Silver | Nickel | Silver | Gold |  |
| L-shaped plug | UG-913/U(42) | 302-0043-0-42 | RG-55/U, 58/U | 0 |  | $\bigcirc$ |  |  |
|  | BNC-LP-59/U(40) | 302-0075-7-40 | RG-59/U, 62/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CV-PL.(40) | 302-0157-0-40 | $3 \mathrm{C}-2 \mathrm{~V}$ | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CW-PL(40) | 302-0158-2-40 | $3 \mathrm{C}-2 \mathrm{~W}$ | $\bigcirc$ |  | $\bigcirc$ |  |  |
| Jack | UG-89/U(40) | 302-0034-0-40 | RG-55/U, 58/U | $\bigcirc$ |  | 0 |  |  |
|  | UG-261/U(40) | 302-0035-2-40 | RG59/U, 62/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3 CV -J(40) | 302-0006-4-40 | $3 \mathrm{C}-2 \mathrm{~V}$ | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-J-1.5WCR(40) | 302-0297-9-40 | 1.5D-2W, 1.5C-2W |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-J-1.5CR(40) | 302-0296-6-40 | 1.5D-2V, $1.5 \mathrm{C}-2 \mathrm{~V}$ |  | $\bigcirc$ | $\bigcirc$ |  |  |
| Panel Jack | UG-291/U(40) | 302-0036-5-40 | RG-55/U, 58/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | 3CA-PJ2(40) | 302-0205-0-40 | RG-58/U, 58/U | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | UG-262/U(40) | 302-0007-7-40 | RG-59/U, 62/U | $\bigcirc$ |  | O |  |  |
|  | BNC-PJ-58(40) | 302-0108-4-40 | RG-55/U, 58/U | $\bigcirc$ |  | 0 |  |  |
|  | BNC-PJ-188/U(40) | 302-0230-8-40 | RG-188A/U |  | 0 | $\bigcirc$ |  |  |
|  | BNC-PJ-196/U(40) | 302-0194-6-40 | RG-196A/U | $\bigcirc$ |  |  | 0 |  |
|  | 3CW-PJ(40) | 302-0139-8-40 | 3C-2W | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-PJ-2.5DV(40) | 302-0238-0-40 | 2.50-2V | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-PJ-1.5(40) | 302-0228-6-40 | 1.5D-2W |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-PJ-1.5W-1(40) | 302-0260-9-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-PJ-1.5W-2(40) | 302-0282-1-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-BPJ-1.5W(40) | 302-0284-7-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-BPJ-1.5W-1(40) | 302-0289-0-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | BNC-BPJ-1.5DW(40) | 302-0400-6-40 |  |  | $\bigcirc$ |  | $\bigcirc$ |  |

## BNCsERIES RFCO-AXIAL CONNECTORS

| Type |  | Part No. | HRS No. | Applicable cable | Surface treatment |  |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Armor |  |  | Center contact |  |  |
|  |  | Silver |  |  | Nickel | Silver | Gold |  |
| Panel jack |  |  | BNC-PJ-1.5DV-1(40) | 302-0285-0-40 | 1.5D-2V |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  |  | BNC-BPJ-1.5-1(40) | 302-0252-0-40 |  |  | $\bigcirc$ |  | 0 |  |
|  |  | BNC-BPJ-1.5DV(40) | 302-0393-2-40 |  |  | $\bigcirc$ |  |  |  |
|  |  | 3CV-PJ2(40) | 302-0204-8-40 | $3 \mathrm{C}-2 \mathrm{~V}$ | $\bigcirc$ |  | 0 |  |  |
|  | liped |  | BNC-LPJ-1.5(40) | 302-0255-9-40 | 1.5D-2V |  | 0 | $\bigcirc$ |  |  |
|  | Flange type | U-290/U(40) | 302-0009-2-40 | 4-M2.6×0.45 | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  |  | 3C-R(40) | 302-0031-1-40 | 4-¢3 | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  |  | BNC-R-1240) | 302-0229-9-40 |  |  | O |  | 0 |  |
|  |  | BNC-R-13(40) | 302-0239-2-40 |  |  | $\bigcirc$ |  | $\bigcirc$ |  |
|  |  | BNC-R-1440) | 302-0245-5-40 |  |  | $\bigcirc$ | 0 |  |  |
|  |  | UG-604/U(40) | 302-0016-8-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  |  | UG-625/U(40) | 302-0017-0-40 |  | $\bigcirc$ |  | 0 |  |  |
|  | Bulk | UG-625/U-4/40) | 302-0221-7-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | head | UG-625/U-10(40) | 302-0253-3-40 | Folk terminal |  | $\bigcirc$ | 0 |  |  |
|  | type | UG-625/U-11A(40) | 302-0274-3-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  |  | UG-657/U(40) | 302-0012-7-40 | drip-proof type | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  |  | UG-657/U-E(40) | 302-0080-7-40 | drip-proof type | $\bigcirc$ |  | $\bigcirc$ |  |  |

## BNCseries RFCO-AXIAL CONNECTORS

| Type |  | Part No. | HRS No. | Applicable cable | Surface treatment |  |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Armor |  |  | Center contact |  |  |
|  |  | Silver |  |  | Nickel | Silver | Gold |  |
|  | Bulk head type |  | UG-1094/U(40) | 302-0178-0-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  |  |  | BNC-FBR(41) | 302-0268-0-41 | Insulation type PPO |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  |  | BNC-FBR-W(40) | 302-0279-7-40 | Metal washer for BNC-FBR |  | O |  |  |  |
|  | $\begin{aligned} & \text { L-shaped } \\ & \text { Hype } \end{aligned}$ | BNC-LR(40) | 302-0020-5-40 |  | 0 |  | O |  |  |
|  | $\begin{aligned} & \text { Plug } \\ & \text { type } \\ & \hline \end{aligned}$ | BNC-BPR-3140) | 302-0249-6-40 |  |  | O |  | 0 |  |
|  |  | BNC-R-PC(40) | 302-0241-4-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | $\begin{aligned} & \text { type } \\ & \text { for } \end{aligned}$ | BNC-R-PC-2(40) | 302-0243-0-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | PCB | BNC-R-PC-7(40) | 302-0280-6-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  |  | BNC-LR-PC(40) | 302-0242-7-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | shaped type | BNC-LR-PC-1(40) | 302-0262-4-40 |  |  | $\bigcirc$ | $\bigcirc$ |  |  |
|  | ${ }_{\text {PCB }}$ | BNC-LR-PC-3(40) | 302-0276-9-40 |  |  | $\bigcirc$ | O |  |  |
|  | $\begin{array}{l\|} \text { Ground } \\ \text { lug plate } \end{array}$ | BNC-EL. | 302-0079-8 |  | 0 |  |  |  |  |

## ENCserfes $R F C O-A X I A L$ connectors

| Type | Part No. | HRS No. | Applicable cable | Surface treatment |  |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Armor |  | Center contact |  |  |
|  |  |  |  | Silver | Nickel | Silver | Gold |  |
| Adaoter | BNC-A-JJ(40) | 302-0039-3-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-A-JJ-1(40) | 302-0050-6-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | BNC-PA-JJ(40) | 302-0052-1-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | UG-414/U(40) | 302-0040-2-40 | PA-JJ type | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | UG-491/U(40 | 302-0022-0-40 | A-PP type | $\bigcirc$ |  | $\bigcirc$ |  |  |
| L-shaped adapter | UG-306/U(40) | 302-0023-3-40 | LA-PJ type | $\bigcirc$ |  | 0 |  |  |
| T-shaped adapter | BNC-TA-JJJ(40) | 302-0024-6-40 |  | $\bigcirc$ |  | $\bigcirc$ |  |  |
|  | UG-274/U(40) | 302-0025-9-40 | (TA-JP type) | $\bigcirc$ |  | $\bigcirc$ |  |  |
| $U$ ring | BNC-UPA(40) | 302-0167-3-40 | 35-mm movable | $\bigcirc$ |  | $\bigcirc$ |  |  |
| Cap | CW-123A/U(40) | 302-0041-5-40 | For jack | $\bigcirc$ |  | $\bigcirc$ |  |  |
| Plug shot | JCW-159/U(40) | 302-0026-1-40 |  | $\bigcirc$ |  | 0 |  |  |

## BNCseries RFco-AXial connectors



Fig. 1


Fig. 2


Fig. 3


Fig. 4


Fig. 5


Fig. 6


Fig. 7

| Fig. | No. | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-1 | 11.4 | 12.7 | 3 | - |
|  | 1-2 | 11.4 | 12.7 | 3.2 | - |
|  | 1-3 | 9.8 | 12.7 | 3 | - |
|  | 1-4 | 5.3 | 12.7 | 3 | - |
|  | 1-5 | 12.3 | 12.7 | 3.2 | - |
|  | 1-6 | 14.3 | 12.7 | 3.2 | - |
|  | 1-7 | 9.8 | 12.7 | 3 | - |
|  | 1.8 | 9.8 | 12.7 | 3.2 | - |
|  | 1-9 | 9.8 | 12.7 | $\begin{array}{cc} \hline(1)-(3) & (2)-4) \\ 3 & 3.2 \end{array}$ | - |
|  | 1-10 | 9 | 12.7 | 3 | - |
|  | 1-11 | 9 | 12.7 | 3.2 | - |
|  | 1-12 | 4.3 | 12.7 | 3.2 | - |
|  | 1-13 | 15 | 18.2 | 3.4 | - |
|  | 1-14 | 7 | 12.7 | 3 | - |


| Fig. | No. | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2-1 | $9.6+0.1$ | $9 \stackrel{+0.1}{0}$ | - | - |
|  | 2-2 | $9.6+{ }_{0}^{+0.1}$ | $8.5+0.1$ | - | - |
|  | 2-3 | $11.3+0.1$ | $10.3+0.1$ | - | - |
|  | 2.4 | $9.6+{ }_{0}^{+0.1}$ | $8.8{ }^{+0.1}$ | - | - |
|  | 2-5 | $12.1{ }^{+0.1}$ | $11.1{ }^{+0.1}$ | - | - |
| 3 | 3-1 | $9.6+0.7$ | $8.1+0.1$ | - | - |
|  | 3.2 | $9.6+{ }_{0}^{+0.1}$ | $8.3+0.1$ | - | - |
|  | 3-3 | $9.6+0.1$ | $8.6+0.1$ | - | - |
| 4 | 4-1 | $12.7{ }^{+0.1}$ | $1.3{ }^{+0.1}$ | $1.8+0.1$ | - |
| 5 | 5-1 | $12.7{ }^{+0.1}$ | - | - | - |
| 6 | 6-1 | $1.6^{+0.1}$ | $1.6{ }^{+0.1}$ | $5.08{ }^{ \pm 0.05}$ | $10.16^{ \pm 0.05}$ |
| 7 | 7-1 | $1.8{ }_{0}^{+0.1}$ | $1.8{ }_{0}^{+0.1}$ | $5.08{ }^{ \pm 0.05}$ | $10.16^{ \pm 0.05}$ |
|  | 7-2 | 1. ${ }^{+0.1}$ | $1.4{ }^{+0.1}$ | $3.81 \pm 0.05$ | $7.62 \pm 0.05$ |

## BNCseries $R F_{\text {CO-AXIAL CONNECTORS }}$

## Functional drawing

Table 1. End processing dimensions arranged by part number

Typical part numbers are enclosed in parentheses


## Connecting methods



The ends are processed as shown in the drawing (refer to Table 1). For the end processing dimensions $L_{1}$, refer to Table 1, End processing dimensions arranged by part number.

(1) Insert clamp from tip of cable and fold outer conductor of cable back onto clamp. Using a knife, cut off excess outer conductor left at this time.
(2) Cut off center conductor of cable at $L_{2}$, from surface $A$ of cable insulation. For end processing dimensions $L_{2}$, $L_{s}$, refer to Table 1 , End processing dimensions arranged by part ( $\mathrm{L}_{3}$ is a reference dimension.) (Note: Be careful not to damage center conductor.)
(3) Solder contact and center conductor. It is a good idea at this time to solder the terminal preliminarily in advance. (Note: There must be no gap between the end and the cable insulation.)


Insert cable and parts into shell and tighten tightening nut sufficiently.

## ENC Srerles $R$ Fco.AXIAL connectors

## Assembling methods


2. Put the cap through the cable, insert the clamp, and unbraid the shielded wire.


1. Cut off 13 mm of the cable's outer covering and expose the shieided wire.
2. Wind the shielded wire onto the clamp. At this time, cut off the shielded wire at position $A$ in the drawing, leaving some gap.
3. Cut off the insulation, leaving about 2 mm of it.

4. Fit the contactor of the outer conductor tightly onto the clamp, position a knife on the notched window, and cut off the insulation.
Take care not to damage the center conductor at this time.
5. Solder the center conduc tor with the contactor of the outer conductor fitting tightly onto the clamp.
6. Insert the block described above so that it will fit into the groove on the clamp and the embossed mark on the armor. Tighten the cap thoroughly. The tools used are a JIS spanner (width 12) and a JIS spanner or monkey wrench (width 14)

## Non-reflective Terminations (BNC)

## BNC-TM Series



## -Product Specifications

## Features <br> Features

## 1.High Performance

These wide bandwidth/ultra high matching nonreflective termination use Hirose Electric original high frequency matching technology.

## 2.Full Assortment of 50 ohms and 75 ohms Types

In addition to the 50 ohms impedance type, plugs and jacks are available in a 75 ohms type. puajalaina

| Ratings | Frequency range (Note) <br> Characteristic impedance <br> Maximum Input Power (Note) | DC to 4.0 GHz <br> 50 ohms, 75 ohms <br> 0.5 to 1 W | Operating temperature range <br> Operating relative humidity | $-10^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$ <br> $95 \% \mathrm{Max}$. |
| :---: | :--- | :---: | :--- | :---: |

Note: The frequency range and the maximum input power will differ depending on the products.

| Item | Standard | Conditions |
| :---: | :---: | :---: |
| 1.Vibration | No electrical discontinuity of $1 \mu \mathrm{~s}$ or more | Frequency of 10 to 2000 Hz , overall amplitude of 1.52 mm , acceleration of $98 \mathrm{~m} / \mathrm{s}^{2}$ for 2 hours in each of 3 directions |
| 2.Shock | No damage, cracks, or parts dislocation | Acceleration of $490 \mathrm{~m} / \mathrm{s}^{2}$, sine half-wave waveform, 3 cycles in each of the 3 axis |
| 3.Temperature cycle | No electrical discontinuity of $1 \mu \mathrm{~s}$ or more | Temperature: $-55^{\circ} \mathrm{C} \rightarrow+15^{\circ} \mathrm{C}$ to $+35^{\circ} \mathrm{C} \rightarrow+85^{\circ} \mathrm{C} \rightarrow+15^{\circ} \mathrm{C}$ to $+35^{\circ} \mathrm{C}$ Time: $30 \rightarrow 15$ max. $\rightarrow 30 \rightarrow 15$ max. (Minutes) 100 cycles |

The test method conforms to MIL-STD-202.

## Materials

| Part | Material | Finish |
| :---: | :---: | :---: |
| Connector Body | Brass | Nickel plating |
| Insulator | PTFE | - |
| Male contacts | Brass | Gold plating |
| Female contacts | Beryllium copper | Gold plating |
| Resistor | Metal film | - |
| Cover | PVC | - |

## Ordering Information



| (1)Series Name: BNC Series | 4)Power |
| :---: | :---: |
| 2 TM:Indicates a non-reflective termination | (Example) : 05: 0.5 W |
| (3) Connector type | 1:1 W |
| P: Plug type | 5 Suffix |
| J: Jack type | 6(4*): RoHS Compliant |

## -Specifications

|  | Part Number | Frequency Range (GHz) | $\begin{aligned} & \text { V.S.W.R. } \\ & \text { (Max) } \end{aligned}$ | Power <br> (W) | Impedance (Ohms) | Direct Current Resistance | Connectors | Weight <br> (g) | RoHS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | BNC-TMP-05(43) | $\begin{gathered} \mathrm{DC} \sim 1 \\ 1 \sim 3 \end{gathered}$ | $\begin{aligned} & 1.10 \\ & 1.20 \end{aligned}$ | 0.5 | 50 | $50 \pm 0.5$ | BNC-P | 15 | YES |
|  | BNC-TMJ-05(42) |  |  | 0.5 | 50 | $50 \pm 0.5$ | BNC-J | 10 |  |
| *1 | BNC-TMP-05-1 (41) | DC~0.1 | 1.10 | 0.5 | 50 | $50 \pm 0.5$ | BNC-P | 15 |  |
| \%1 | BNC-TMJ-05-1(41) |  |  | 0.5 | 50 | $50 \pm 0.5$ | BNC-J | 10 |  |
| \%2 | BNC-TMP-05-2(42) | $\begin{gathered} \mathrm{DC} \sim 1 \\ 1 \sim 3 \end{gathered}$ | $\begin{aligned} & 1.10 \\ & 1.20 \end{aligned}$ | 0.5 | 50 | $50 \pm 0.5$ | BNC-P | 16 |  |
| *2 | BNC-TMJ-05-2(42) |  |  | 0.5 | 50 | $50 \pm 0.5$ | BNC-J | 11 |  |
|  | BNC-TMP-05(75)(40) | $\begin{gathered} D C \sim 0.5 \\ 0.5 \sim 2 \end{gathered}$ | $\begin{aligned} & 1.15 \\ & 1.20 \end{aligned}$ | 0.5 | 75 | $75 \pm 2.25$ | BNC-P(75) | 14 |  |
|  | BNC-TMJ-05(75)(40) |  |  | 0.5 | 75 | $75 \pm 2.25$ | BNC-J(75) | 9 |  |
|  | BNC-TMP-1(42) | $\begin{gathered} D C \sim 1 \\ 1 \sim 2 \\ 2 \sim 4 \end{gathered}$ | $\begin{aligned} & 1.15 \\ & 1.20 \\ & 1.25 \end{aligned}$ | 1 | 50 | $50 \pm 2$ | BNC-P | 16 |  |

※1 Low-cost items with DC to 100 MHz bandwidth limit.
※2 Cover fitting type

■Typical Data


BNC-TMJ-05(42)


BNC-TMP-1(42)


BNC-TMP-05(75)(40)


BNC-TMJ-05(75)(40)


## External Dimensions



BNC -TMP-05(43)
BNC -TMP -05-1(41) BNC -TMP-05(75)(40)


BNC -TMP -05-2(42)


BNC -TMP-1(42)


BNC -TMJ-05(42)
BNC -TMJ-05-1(41)
BNC -TMJ-05(75)(40)


BNC -TMJ-05-2(42)
※BNC-TMP/TMJ-05 Series have a 50 ohms or 75 ohms indication for each characteristic impedance.

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M39012/79B3001 M39012/80-3107 M39012/55-3030 M39012/56-3126 M55339/02-30001 M55339/28-30001 M55339/28-30002
M55339/29-30001 M55339/31-30001 SMA2071A1-3GT50G-50 1102-0003 M39012/26-0011 M39012/26-0012
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