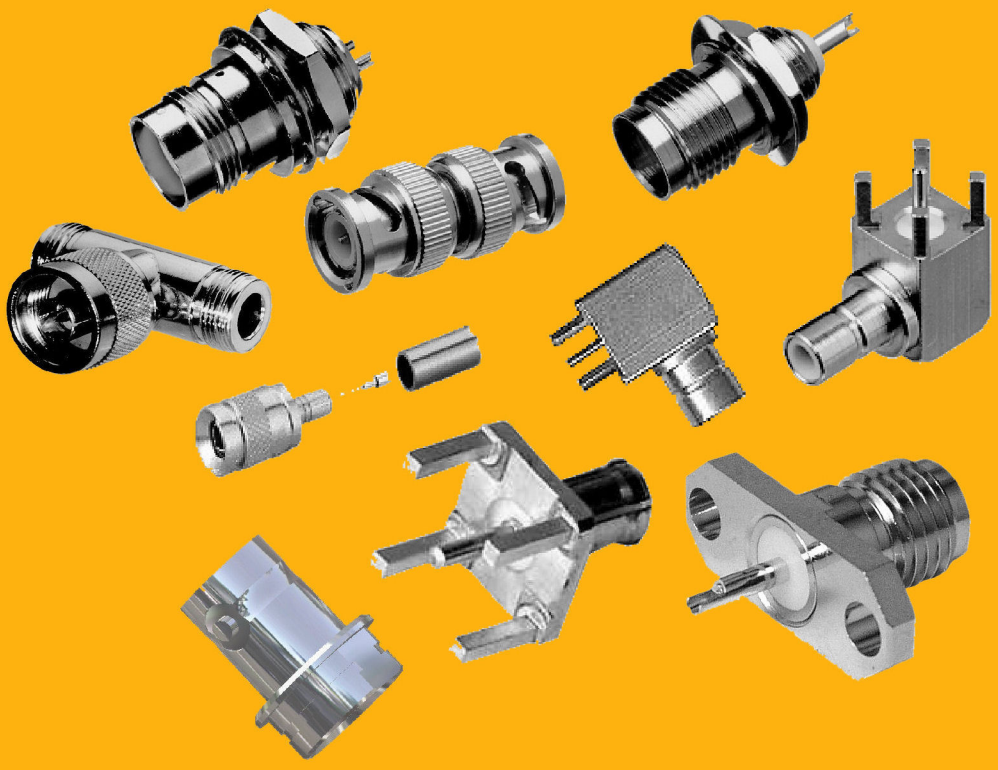
Cambridge Connectors
a division of Cambridge Electronic Industries Ltd

Co-axial Connectors



Denny Industrial Centre, Waterbeach, Cambridge CB25 9QR England
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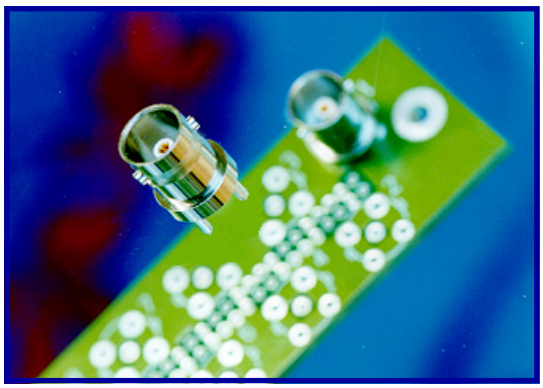
Press fit BNC Co-axial Connector



Features:

- **No design change costs**
  the footprint is identical to solder BNC connectors minimising board re-design changes.
- **High retention forces**
  unique construction method gives retention forces up to 780N
- **Lower inspection costs**
  consistent gas tight joint every time independent of operator skills
- **Reduced stock costs**
  fast throughput ensures work in progress is greatly reduced.
- **Increased connection density**
  low profile provides higher stacking densities.
- **Safety and environment benefits**
  press fit termination creates no fumes or hazardous waste.

The new BNC Press Fit series introduced by Cambridge Connectors, which interfaces to all standard BNC connectors, incorporates several innovative features providing considerable benefits over other types. (These features have been design right protected by Cambridge Connectors).

Contact Shape The contact combines traditional Press Fit technology (square pin in a round hole) with modern compliant fit theory (easily deformed, shaped contacts) giving a contact which benefits from having a high retention force but low distortion of the PCB hole. This design allows the Cambridge Connectors Press Fit BNC connector to be used over a range of hole sizes to suit a variety of withdrawal force requirements.

Contact Material The degree of contact deformity is a direct function of the material used. The contact composition of Cambridge Connectors BNC connector ensures that sufficient distortion of the contact takes place to give a gas tight connection while maintaining lower insertion forces.

Standard Footprint The footprint of the Press Fit BNC is identical to standard solder BNC connectors. This means that PCB's designed to accept solder BNC connectors can also accept Cambridge Connectors Press Fit BNC without modification to track layouts; some changes to hole sizes may be required depending on application (see specification).

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Press fit BNC Co-axial Connector

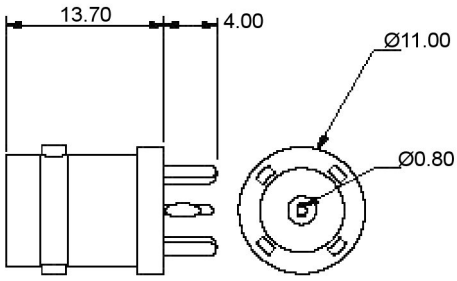
Low Profile The Cambridge Connectors Press Fit BNC connector at 13.7mm, has one of the lowest profiles available. This is an important space saving feature which enables a higher stacking density of PCB cards. It also reduces the possibility of accidental damage caused by connectors protruding. (Different profiles are available if required).

Multiple Insertion Tooling Although Press Fit BNC connectors can be installed individually much more quickly than solder versions it is when multiple insertions are made that considerable cost savings can be achieved. In a typical application 8 Press Fit BNC connectors can be installed in a single cycle in less than 20 seconds. This is achieved using multi-positional tooling available from Cambridge Connectors. As a result production volumes can increase significantly and working stock can be reduced.

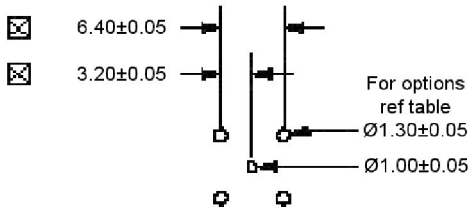
Range of Extraction Forces Depending on the application, the Press Fit BNC can be used with PCB holes of standard diameters between 1.3mm and 1.5mm. The specification overleaf shows the variations in extraction forces achieved at hole diameters of 1.3, 1.4 and 1.5mm. Cambridge Connectors recommend a hole size of 1.4mm for optimum performance but perfectly satisfactory results are achieved at 1.3 and 1.5mm.

Consistent Performance The material contacts and construction method of the BNC Press Fit connector from Cambridge Connectors ensure consistent results. In this way the installation process is independent of operator skills. Such consistency greatly reduces physical and electrical inspection costs.

Environmentally Friendly Press Fit techniques produce no fumes or chemical waste, an important aspect with regard to the control of substances hazardous to health (COSHH) and the safe disposal of hazardous materials.



Component



PCB Layout

Notes: PCB thickness 3.6mm
PCB material FR4

Hole Dia mm	Plating Thickness		Pad Dia.
	Copper	Tin Lead	
1.3	0.03-0.08	0.008	2.0
1.4	0.03-0.08	0.008	2.2
1.6	0.03-0.08	0.008	2.3
1.0	0.03-0.08	0.008	1.6

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Press fit BNC Co-axial Connector

Specification

Material:

Body:	Turned Brass	Nickel Plated
	Centre Contact	Phosphor Bronze
	Insulator	Teflon

Electrical:

Impedance	50 Ohm	75 Ohm
Frequency Range	0-4 GHz	0-1 GHz
VSWR	1.3(DC-1GHz)	1.05(DC-1GHz)
Working Voltage:	<500 V rms	<500 V rms
Insulation Resistance:	>5000 M Ohms	>5000 M Ohms

Mechanical:

Outer Diameter	1.3mm	1.4mm	1.5mm
Inner Conductor Diameter:	1.0mm	1.0mm	1.0mm
Extraction Force:	>780N	>505N	>265N
Board Thickness:	<3.5mm	<3.5mm	<3.5mm

50 Ohm Connector unique Part No. XBT-1050-NGAW

75 Ohm Connector unique Part No. XBT-1050-NGAY

75 Ohm Connector with protective insulator unique Part No. XBT-1052-NGAY

Cambridge Connectors Press Fit BNC is also available in different heights and a variety of footprints. It is also available in right angle versions. Contact Sales desk for further information

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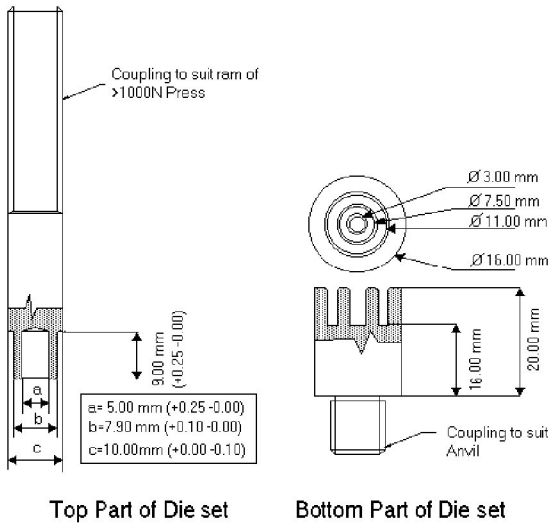
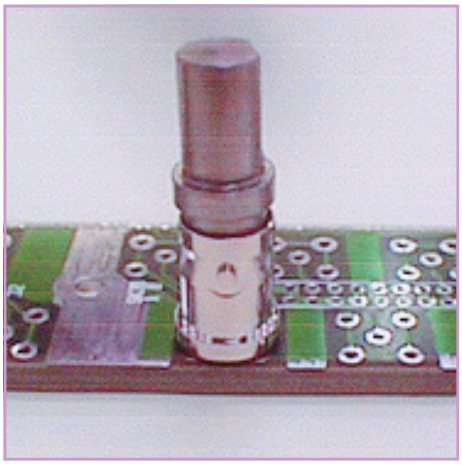
Press fit Co-axial Connector Tooling

The diagram illustrates a typical two piece die set for the insertion of Cambridge Connectors' Press Fit BNC into Printed Circuit Boards. Couplings will vary depending on the equipment being used.



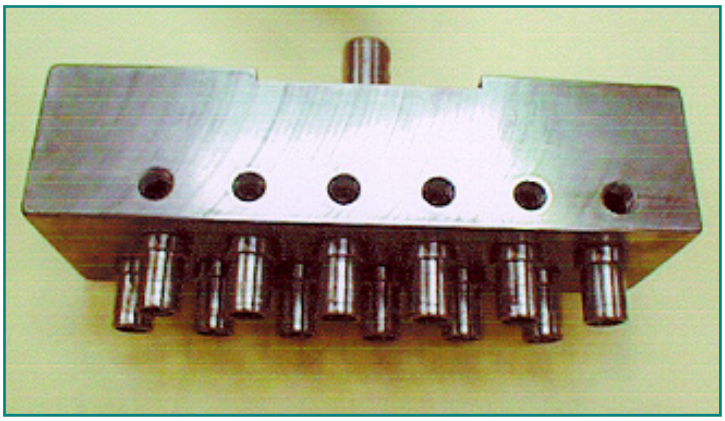
Top Part of Die set Bottom Part of Die set



Single Position Tooling

The photograph opposite shows an example of a single position die set for the insertion of individual BNC connectors.

The photograph opposite shows an example of multi position tooling for the insertion of several BNC connectors in one operation. In this case die sets are mounted into a bolster designed to meet the layout requirements of the PCB.



Multi Position Tooling

It must be noted that the insertion forces specified are for each individual connector. Multi-insertion requires forces proportional to the number of connectors being inserted.

For further information on Press Fit tooling contact our technical applications department.

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BNC

- **BNC Crimp Plug**
  for Cable Groups: AA/AB/AC/AD/AE/AF/AG/AH

  Unique P/N: 1002 (see Ordering Code)

  NOTE: Captive contacts:
  Groups = AA/AB/AC/AE/AH
  Non-captive contacts: Groups = AD/AF/AG

BNC

- **BNC R/Ang Crimp Plug**
  for Cable Groups: AA/AB/AC/AE
  Contact: captive type

  Unique P/N: 1019

  (see Ordering Code)

BNC

- **BNC Dual Crimp Plug**
  for Cable Group: AA

  Unique P/N: 1036

  (see Ordering Code)

BNC

- **BNC R/Ang Dual Crimp Plug**
  for Cable Group: AA

  Unique P/N: 1035

  (see Ordering Code)

BNC

- **BNC Solder Plug**
  for Cable Groups: AA/AB/AC/AE
  contact: captive type

  Unique P/N: 1001

  (see Ordering Code)

BNC

- **BNC Twist-on Plug**
  for Cable Group: AE

  Unique P/N: 1003

  (see Ordering Code)
  NOTE: use only with solid centre conductor cable

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BNC

- **BNC Crimp Jack**
  for Cable Groups AA/AB/AC/AE
  contact: captive type

  Unique P/N: 1008

  (see Ordering Code)

BNC

- **BNC Crimp Jack**
  for Cable Group: AD

  Unique P/N: 1018

  (see Ordering Code)

BNC

- **BNC Bulkhead Crimp Jack**
  for Cable Groups: AA/AB/AC/AD/AE/AF
  contact: AA/AB/AC/AE = captive
  AD/AF = non captive
  max. bulkhead thickness: 3.5mm
  Unique P/N: 1014 (see Ordering Code)

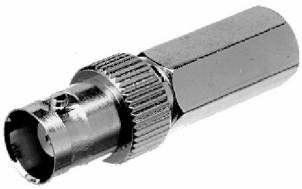
BNC

- **BNC Solder Jack**
  for Cable Groups: AA/AB/AC/AE
  contact: captive type

  Unique P/N: 1013

  (see Ordering Code)

BNC



- **BNC Twist-on Jack**
  for Cable Group: AE

  Unique P/N: 1016

  (see Ordering Code)

  NOTE: use only with solid centre conductor cable

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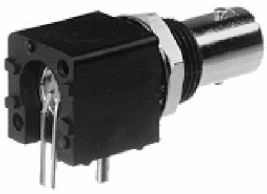
BNC

- **BNC PCB Socket 13.7mm high**
  for use with appropriate Cable Group, please specify.

  Unique P/N: 1017

  Other heights available
  (see Ordering Code)

BNC



- **BNC R/Ang. PCB Socket**
  for use with appropriate Cable Group: please specify

  Unique P/N: 1021 - 15.4mm high
  Unique P/N: 1053 - 13mm high
  (see Ordering Code)

BNC

- **BNC Right Angle PCB Socket**
  Die Cast metal body 75 ohm

  Unique P/N: 1047 15.14 mm high
  Unique P/N: 1048 13.00 mm high
  (see Ordering Code)

BNC

- **BNC Right Angle PCB Socket**
  Die Cast metal body 50 ohm

  Unique P/N: 1045 15.14 mm high
  Unique P/N: 1046 13.00 mm high
  (see Ordering Code)

BNC

- **BNC Ultra Low Right Angle PCB Socket**
  Die Cast metal body
  Unique P/N: 1049
  (see Ordering Code)
  Also available in a splashproof version

BNC

- **BNC Piggy Back Right Angle PCB Socket 75 ohm**

  Unique P/N: C-SX-045 - Plastic Version
  Unique P/N: C-SX-053 - Metal Version

BNC

- **BNC Straight PCB Socket**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1022 (see Ordering Code)

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BNC

- **BNC Bulkhead Socket**
  for use with appropriate Cable Group: please specify

  max. bulkhead thickness: 3.2mm

  Unique P/N: 1005
  (see Ordering Code)

BNC

- **BNC Bulkhead Socket - isolated**
  for use with appropriate Cable Group: please specify

  max. bulkhead thickness: 4.8mm

  Unique P/N: 1007
  (see Ordering Code)

BNC

- **BNC Bulkhead Socket - isolated**
  for use with appropriate Cable Group: please specify

  max. bulkhead thickness: 3mm
  Unique P/N: 1020 (see Ordering Code)

BNC

- **BNC Panel Socket**
  for use with appropriate Cable Group: please specify.

  max. panel thickness: 3mm

  Unique P/N: 1004
  (see Ordering Code)

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BNC

- **BNC Terminator Plug**
  1 Watt, 50 Ohm
  P/N: XBD-1023-NGAW

  1 Watt, 75 Ohm
  P/N: XBD-1023-NGAY

BNC

- **BNC Adaptor - male/male**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1010

  (see Ordering Code)

BNC

- **BNC Adaptor - female/female**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1009

  (see Ordering Code)

BNC

- **BNC Bulkhead Adaptor - female/female**
  for use with appropriate Cable Group, please specify.

  max. bulkhead thickness: 8mm

  Unique P/N: 1015

  (see Ordering Code)

BNC

- **BNC Bulkhead Adaptor - isolated female/female**
  for use with appropriate Cable Group: please specify
  max. bulkhead thickness: 5.5mm

  Unique P/N: 1044

  (see Ordering Code)

BNC

- **BNC T Adaptor - female/male/female**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1006

  (see Ordering Code)

BNC

- **BNC T Adaptor - female/female/female**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1011

  (see Ordering Code)

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BNC

- **BNC Right Angled Adaptor - male/female**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1012

  (see Ordering Code)

BNC

- **BNC Goal-post Adaptor - 1 male/2 female**
  for use with appropriate Cable Group, please specify.

  Unique P/N: 1033

  (see Ordering Code)

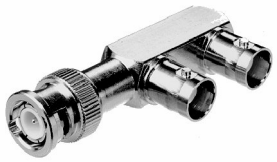
BNC

- **BNC R/Ang Goal-post Adaptor - 1 male/2 female**
  for use with appropriate Cable Group: please specify

  Unique P/N: 1034

  (see Ordering Code)

BNC



- **BNC 'F' Adaptor - 1 male/2 female**
  for use with appropriate Cable Group: please specify.

  Unique P/N: 1037

  (see Ordering Code)

BNC

- **BNC Dust Cap**
  for the protection of 50Ω and 75Ω unused sockets

  Unique P/N: XBA 001

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TNC

- **TNC Crimp Plug**
  for Cable Groups: AA/AB/AC/AE
  contact: captive type

  Unique P/N: 2001

  (see Ordering Code)

TNC

- **TNC Solder Plug**
  for Cable Groups: AA/AB/AC/AE
  Contact: captive type

  Unique P/N: 2000

  (see Ordering Code)

TNC

- **TNC Bulkhead Socket**
  for use with appropriate Cable Group: please specify

  max. bulkhead thickness: 3.2mm

  Unique P/N: 2002

  (see Ordering Code)

TNC

- **TNC Adaptor - male/male**
  for use with appropriate Cable Group: please specify

  Unique P/N: 2006

  (see Ordering Code)

TNC

- **TNC Adaptor - female/female**
  for use with appropriate Cable Group: please specify

  Unique P/N: 2003

  (see Ordering Code)

TNC

- **TNC Bulkhead Adaptor female/female**
  for use with appropriate Cable Group: please specify

  max. bulkhead thickness: 7mm

  Unique P/N: 2004 (see Ordering Code)

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TNC

- **TNC Right Angled Adaptor - male/female**
  for use with appropriate Cable Group: please specify

  Unique P/N: 2005

  (see Ordering Code)

TNC

- **TNC Crimp Jack**
  for Cable Groups: AA/AB/AC/AE
  contact: captive type

  Unique P/N: 2007

  (see Ordering Code)

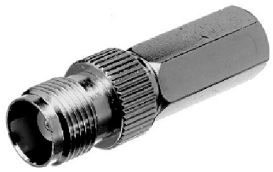
TNC

- **TNC Bulkhead Crimp Jack**
  for Cable Groups: AA/AB/AC/AE
  contact: captive type

  max. bulkhead thickness: 3.5mm

  Unique P/N: 2010 (see Ordering Code)

TNC



- **TNC Twist-on Jack**
  for Cable Group: AE

  Unique P/N: 2008 (see Ordering Code)

  NOTE: use only with solid centre conductor cable

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TWINAX

- **TWINAX Crimp Plug**

  Unique P/N: 3007

  (see Ordering Code)

TWINAX

- **TWINAX Solder Plug**
  IBM 7362229

  Unique P/N: 3000

  (see Ordering Code)

TWINAX

- **TWINAX Terminator Plug**

  Unique P/N: 3008

  (see Ordering Code)

TWINAX

- **TWINAX Bulkhead Socket**
  IBM 7362179

  Unique P/N: 3001

  (see Ordering Code)

TWINAX

- **TWINAX Adaptor - female/female**
  IBM 7362230

  Unique P/N: 3002

  (see Ordering Code)

TWINAX

- **TWINAX Bulkhead Adaptor - female/female**

  Unique P/N: 3003

  (see Ordering Code)

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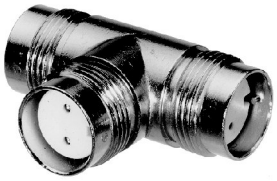
TWINAX

- **TWINAX T Adaptor - female/male/female**
  IBM 4178269

  Unique P/N: 3004

  (see Ordering Code)

TWINAX



- **TWINAX T Adaptor - female/female/female**
  IBM 6851167
  Unique P/N: 3005

  (see Ordering Code)

TWINAX

- **TWINAX Solder Jack**
  IBM 6838959

  Unique P/N: 3009

  (see Ordering Code)

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N Series

- **N Crimp Plug**
  for Cable Groups: AA/AE/AJ
  contact: captive type

  Unique P/N: 4001

  (see Ordering Code)

N Series

- **N Terminator Plug**
  1 Watt, 50 Ohm

  P/N: XNT-4003-NGAW

N Series

- **N Panel Socket**
  for use with appropriate Cable Group: please specify

  Unique P/N: 4007

  (see Ordering Code)

N Series

- **N Straight Adaptor female/female**
  Cable Group: AW

  Unique P/N: 4005

  (see Ordering Code)

N Series

- **N T Adaptor female/male/female**
  Cable Group: AW

  Unique P/N: 4006

  (see Ordering Code)

N Series

- **N Solder Jack**
  for Cable Groups: AA/AE

  Unique P/N: 4002

  (see Ordering Code)

N Series

- **N Terminator Jack**
  1 Watt, 50 Ohm

  P/N: XNT-4004-NGAW

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SMA

- **SMA Crimp Plug**
  for Cable Groups: AA/AD
  contact: solder type

  Unique P/N: 6000

  (see Ordering Code)

SMA

- **SMA R/Ang Crimp Plug**
  for Cable Groups: AA/AD
  contact: solder type

  Unique P/N: 6001

  (see Ordering Code)

SMA

- **SMA Bulkhead Crimp Jack**
  for Cable Groups: AA/AD
  contact: solder type

  Unique P/N: 6002

  (see Ordering Code)

SMA

- **SMA Clamp Plug**
  for Cable Groups: AA/AD
  contact: solder type

  Unique P/N: 6003

  (see Ordering Code)

SMA

- **SMA Bulkhead Clamp Jack**
  for Cable Groups: AA/AD
  contact: solder type

  Unique P/N: 6004

  (see Ordering Code)

SMA

- **SMA R/Ang Clamp Plug**
  for Cable Groups: AA/AD
  contact: solder type

  Unique P/N: 6005

  (see Ordering Code)

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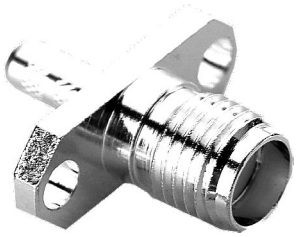
SMA

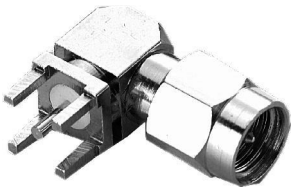


- **SMA Panel Mount Socket 2 hole flange**

Unique P/N: 6010

(see Ordering Code)

SMA



- **SMA R/Ang PCB Plug**

Unique P/N: 6011

(see Ordering Code)

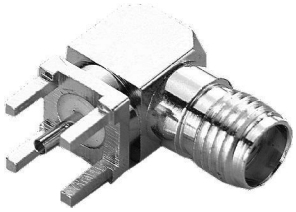
SMA

- **SMA Straight PCB Plug**

Unique P/N: 6012

(see Ordering Code)

SMA

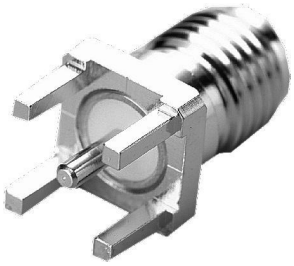


- **SMA Right Angle PCB Socket**

Unique P/N: 6013

(see Ordering Code)

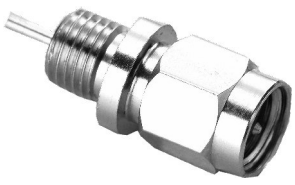
SMA



- **SMA Straight PCB Socket**

Unique P/N: 6007
(see Ordering Code)

SMA



- **SMA Solder Bucket Plug Rear Panel Mount**

Unique P/N: 6014

(see Ordering Code)

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SMA

- **SMA Solder Bucket Socket Rear Panel Mount**

Unique P/N: 6015

(see Ordering Code)

SMA

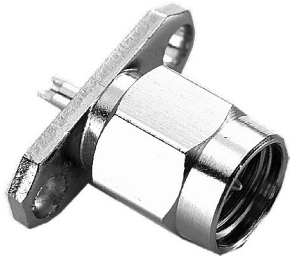
- **SMA Panel Mount Socket 2 hole flange. Solder Bucket**

4 hole version available

Unique P/N: 6016

(see Ordering Code)

SMA



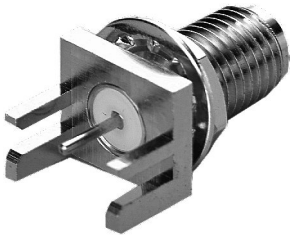
- **SMA Panel Mount Plug 2 hole flange. Solder Bucket**

4 hole version available

Unique P/N: 6017

(see Ordering Code)

SMA



- **SMA Edge Mount PCB Socket Bulkhead**

Unique P/N: 6018

(see Ordering Code)

SMA

- **SMA Panel Mount Plug 2 hole flange. Exposed PTFE**

4 hole version available

Unique P/N: 6019

(see Ordering Code)

SMA

- **SMA Panel Mount Socket 2 hole flange. Exposed PTFE**

4 Hole version available

Unique P/N: 6020

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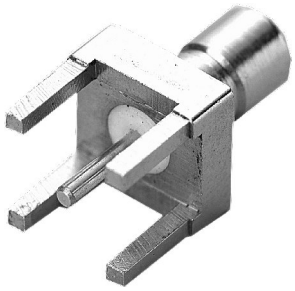
SMB



● **SMB PCB Socket**
for use with appropriate Cable Group: please specify

Unique P/N: 6300

(see Ordering Code)

SMB

● **SMB R.Ang PCB Socket**
for use with appropriate Cable Group: please specify

Unique P/N: 6301

(see Ordering Code)

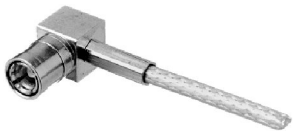
SMB

● **SMB Crimp Plug**
for Cable Groups: AD/AF
contact: solder type

Unique P/N: 6303

(see Ordering Code)

SMB



● **SMB R.Ang Crimp Plug**
for Cable Groups: AD/AF
contact: solder type

Unique P/N: 6304

(see Ordering Code)

SMB

● **SMB Clamp-type Plug**
for Cable Groups: AD/AF
contact: solder type

Unique P/N: 6305

(see Ordering Code)

SMB

● **SMB R.Ang Clamp-type Cable Plug**
for Cable Groups: AD/AF
contact: solder type

Unique P/N: 6306

(see Ordering Code)

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SMB

- **SMB Straight Crimp Socket**

Unique P/N: 6307

(see Ordering Code)

SMB

- **SMB Bulkhead Mount Crimp Socket**

Unique P/N: 6308

(see Ordering Code)

SMB

- **SMB Right Angle Crimp Socket**

Unique P/N: 6309

(see Ordering Code)

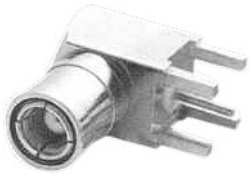
SMB

- **SMB Straight PCB Plug**

Unique P/N: 6310

(see Ordering Code)

SMB

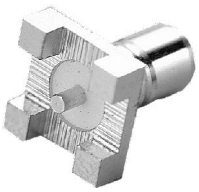


- **SMB Right Angle PCB Plug**

Unique P/N: 6311

(see Ordering Code)

SMB



- **SMB Straight PCB SMT Socket**

Unique P/N: 6312

(see Ordering Code)

SMB

- **SMB Straight Solder Bulkhead Socket Front Mount**

Unique P/N: 6313

(see Ordering Code)

SMB

- **SMB Straight Solder Bulkhead Socket Rear Mount**

Unique P/N: 6314

(see Ordering Code)

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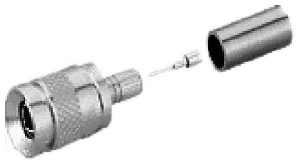
1.0/2.3 Connectors to DIN 47297

These 50 ohm coaxial connectors are manufactured to the highest specification. Their outstanding electrical and mechanical properties ensure exceptional reliability even in demanding environments. They are particularly suitable for telecommunication applications, especially where space is at a premium and high wiring densities are required.

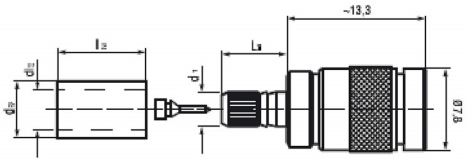
Specification

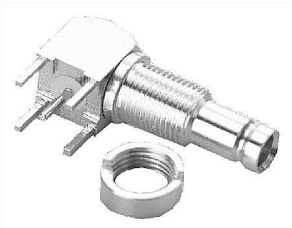
Materials	
Housing components	Brass
Spring contacts	Beryllium
Insulated parts	Teflon
Electrical & Mechanical data	
Impedance	Z_w = 50 Ohms
Max. operating frequency	1 - 30 GHz
Contact resistance	
Inner conductor	≤ 6m Ohms
Outer conductor	≤ 3m Ohms
Insulation resistance	≥ 10^6 m Ohms
Test voltage	750V 50 Hz

Reflection factor (VSWR)	
Z_w = 50 Ohms	
up to 1 GHz	≤ 5%
1-4 GHz	≤ 7%
4-8 GHz	≤ 10%
Z_w = 75 Ohms	
up to 100 MHz	≤ 4%
100-200 MHz	≤ 7%
200-300 MHz	≤ 10%
Temperature range	-55 C to +125°C

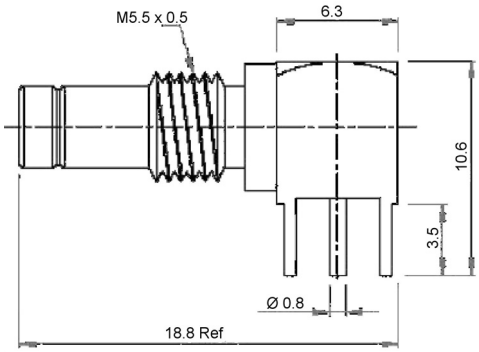


- 1.0/2.3 Straight push pull crimp cable **Plug**
  Unique number 8000
  Crimp Table
  Ordering Code

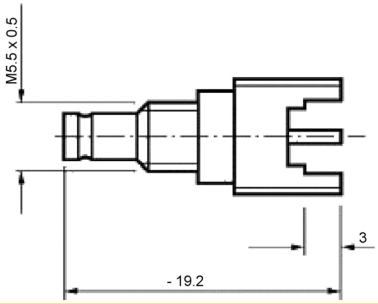




- 1.0/2.3 90° **Socket** PCB mounted
  Unique number 8001
  Ordering Code



- 1.0/2.3 straight long **Socket** PCB mounted
  Unique number 8002
  Ordering Code



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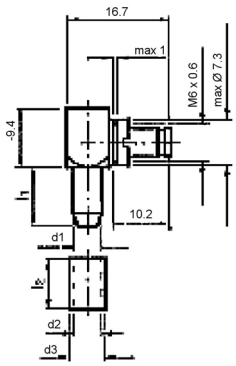
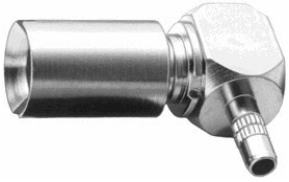
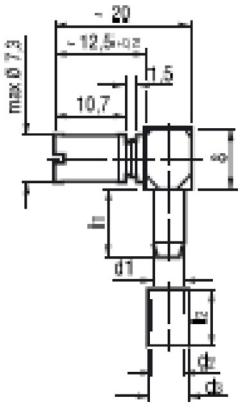
- 1.0/2.3 90° crimp cable **Socket**
  Unique number 8003
  Crimp Table
  Ordering Code



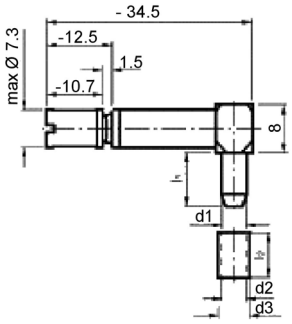


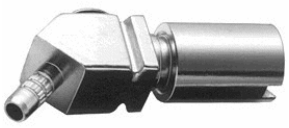
- 1.0/2.3 90° short crimp cable
  Plug
  Unique number 8004
  Crimp Table
  Ordering Code



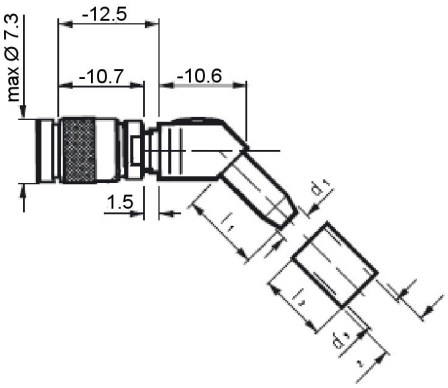
- 1.0/2.3 90° medium crimp cable
  Plug
  Unique number 8005
  Crimp Table
  Ordering Code

- 1.0/2.3 90° long crimp cable
  Plug
  Unique number 8006
  Crimp Table
  Ordering Code





- 1.0/2.3 45° crimp cable **Plug**
  Unique number 8007
  Crimp Table
  Ordering Code



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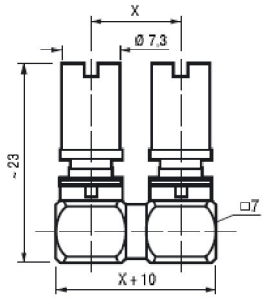
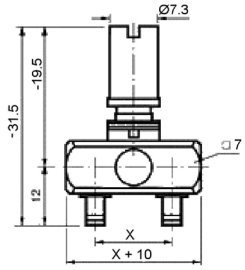
- 1.0/2.3 U-Link **Plug**
  Unique number 8008
  Ordering Code



- 1.0/2.3 U-Link **Socket** with monitor plug
  Unique number 8009
  Ordering Code



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1.6/5.6 Connectors to DIN 47295

These 75 ohm coaxial connectors are manufactured to the highest specifiction and are extensively used in the telecommunicions industry.

Specification

Mechanical data

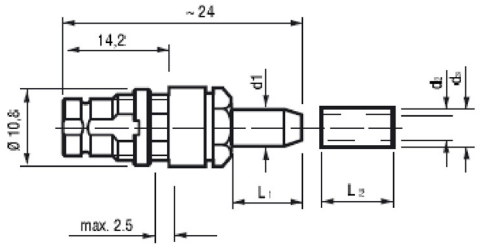
Materials

Housing, fixing components	Brass
Spring contacts	Beryllium
Insulated parts	Teflon
Insertion/withdrawal forces	DIN 47295
Temperature range	-55ºC to + 150ºC

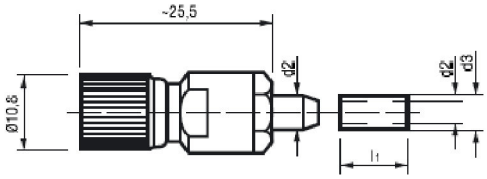
Electrical data

Impedance Zw	75 Ohms
Max. operating frequency	1 GHz
VSWR VSWR	1.3 max (straight) 1.5 max (rt. angle)
Insulation resistance	$\geq 10^{12}$ Ohms
Contact resistance Inner conductor Outer conductor	 $\leq$ 4m Ohm $\leq$ 2m Ohm
Isolation Voltage	1.5 kV
Operating voltage	500V

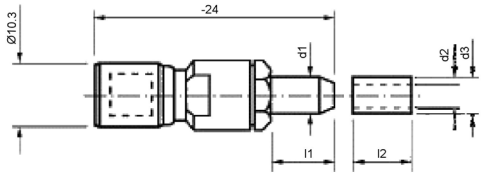
- 1.6/5.6 Straight Bulkhead crimp cable **Socket**
  Unique number 9000
  Crimp Table
  Ordering Code



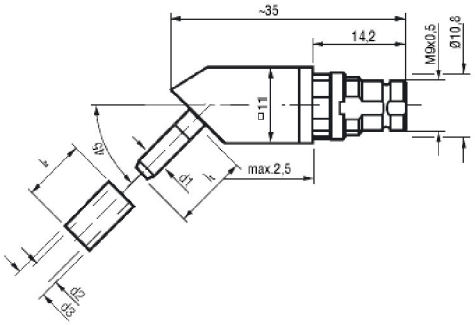
- 1.6/5.6 Straight screw fastening crimp cable **Plug**
  Unique number 9001
  Crimp Table
  Ordering Code



- 1.6/5.6 Straight snap fit crimp cable **Plug**
  Unique number 9002
  Crimp Table
  Ordering Code



- 1.6/5.6 45° crimp cable **Socket**
  Unique number 9003
  Crimp Table
  Ordering Code



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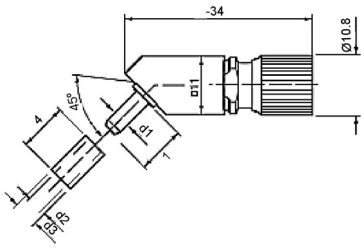
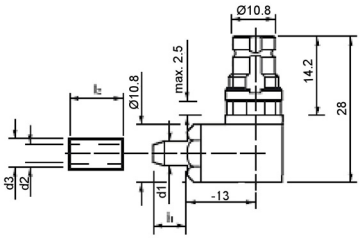
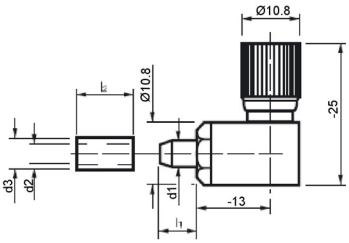
- 1.6/5.6 45° screw fastening crimp cable **Plug**
  Unique number 9004
  Crimp Table
  Ordering Code



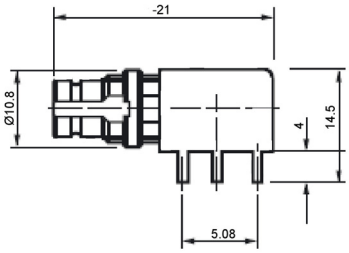
- 1.6/5.6 90° screw cable **Socket**
  Unique number 9005
  Crimp Table
  Ordering Code



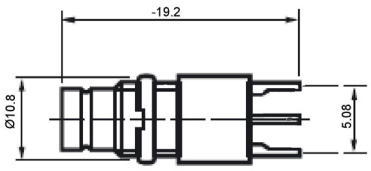
- 1.6/5.6 90° screw fastening crimp cable **Plug**
  Unique number 9006
  Crimp Table
  Ordering Code



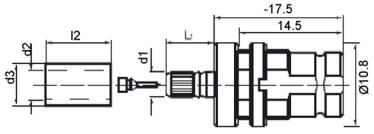
- 1.6/5.6 90° **Socket** PCB mounting
  Unique number 9007
  Ordering Code



- 1.6/5.6 straight **Socket** PCB mounting
  Unique number 9009
  Ordering Code



- 1.6/5.6 straight crimp cable **Socket**
  Unique number 9010
  Crimp Table
  Ordering Code



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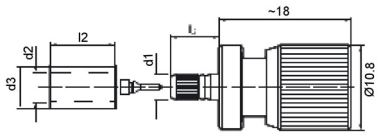
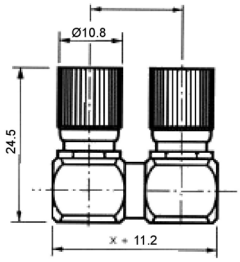
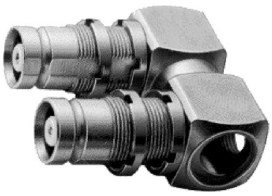
- 1.6/5.6 straight crimp cable **Plug**
  Unique number 9011
  Crimp Table
  Ordering Code

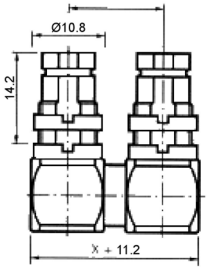


- 1.6/5.6 U-Link screw fastening **Plug**
  Unique number 9012
  Ordering Code

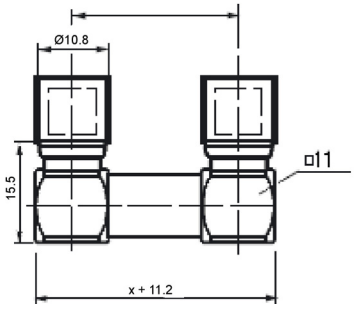


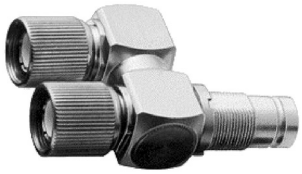


- 1.6/5.6 U-Link **Socket**
  Unique number 9013
  Ordering Code

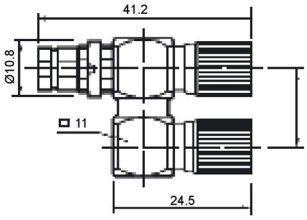


- 1.6/5.6 U-Link snap-fit **Plug**
  Unique number 9014
  Ordering Code





- 1.6/5.6 U-Link screw fastening **Plug** with monitor socket
  Unique number 9008
  Ordering Code



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MCX Miniature RF Connector

The MCX is a miniature coaxial style RF connector based on the SMB “push-pull snap-on” mating system with a frequency range from 0-6 GHz.

Construction	Material	Plating
Connector Body	Brass	Nickel or Gold
Centre Contact	Male Brass Female Beryllium Copper	30µ “ gold over 100µ “ nickel
Insulation	Teflon	None
Gasket	Silicone Rubber	None
Crimp Ferrule	Annealed Copper	same as body

Mechanical	
Mating	“Push-pull” snap-on coupling
Mating cycles	≤ 500
Temperature Range	-65°C to 165°C

Electrical	
Impedance	50 Ohm 0 to 6.0 GHz
Frequency Range	0 to 6.0 GHz
VSWR	0-2 GHZ=1.22 max (straight) 1.50 max (right angle) 2-6 GHz=1.35 max (straight) 1.63 max (right angle)
Isolation Voltage	RG-174, 188,316 Ž750 volts rms max RG-178, 196 Ž 500 volts rms max
Contact Resistance	centre contact = 5.0 milliohms max outer contact = 1.0 milliohms max
RF Leakage	-60 dB min
Insertion Loss	.4 dB max (straight) .6 dB max (right angle)
Insulation Resistance	1,000 Megohms min

MCX

- **MCX Straight Crimp Plug**

Unique P/N:A001

(see Ordering Code)

MCX

- **MCX Right Angle Crimp Plug**

Unique P/N:A000

(see Ordering Code)

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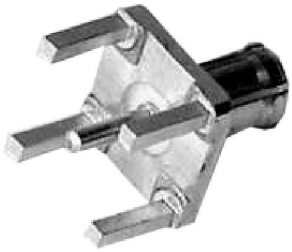
MCX

- **MCX Straight Crimp Socket**

Unique P/N:A002

(see Ordering Code)

MCX

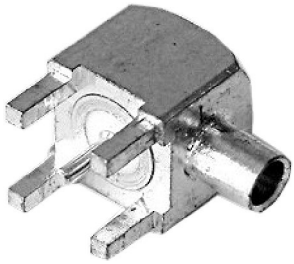


- **MCX Straight PCB Mount Plug**

Unique P/N:A003

(see Ordering Code)

MCX



- **MCX Right Angle PCB Mount Socket**

Unique P/N:A004

(see Ordering Code)

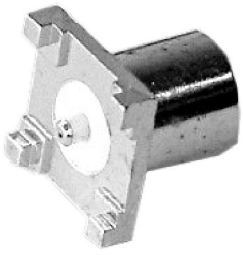
MCX

- **MCX Straight PCB Mount Socket**

Unique P/N:A006

(see Ordering Code)

MCX



- **MCX Straight PCB SMT Socket**

Unique P/N:A007

(see Ordering Code)

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Type 43 (SMZ) Connectors

These 75 ohm connectors are manufactured to the highest specifications and are used extensively in telecommunication Digital Distribution Frame (DDF) applications. Two variations are available from Cambridge Connectors: a) Standard Type43 for use in 12.7mm (13 nominal) pitch applications and b) "High Density" HD43 for use in 10mm pitch applications. High density HD43 Sockets can be used with either standard or HD43 Plugs. However, standard Type43 Sockets should only be used with standard Type43 Plugs.

Standard Type43 Connectors

- **Type43 Straight latching crimp Socket**
  for cables BT2002, 2003, 3002, RG179B/U

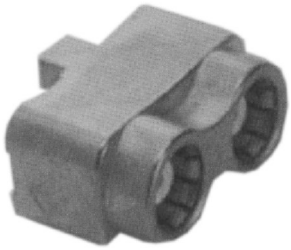
Cable Type	Type No.
2002	43/2FS
2003	43/3FS
3002/TZC	43/5FS
RG179B/U	43/4FS

Unique P/N: 7010
(see Ordering Code)

- **Type43 Straight DDF Plug**
  for cables BT2002, 2003, 3002, RG179B/U

Cable Type	Type No.
2002	43/2GTIS
2003	43/3GTIS
3002/TZC	43/5GTIS
RG179B/U	43/4GTIS

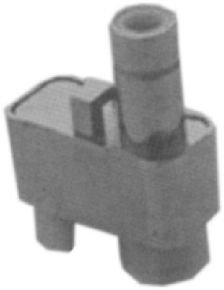
Unique P/N: 7002
(see Ordering Code)



- **Type43 U Link with two Sockets** to link 2 plugs on DDF with pitch of 12.7mm

Type No. 13A

Unique P/N: 7004
(see Ordering Code)



- **Type43 U Link with two Sockets** and monitor plug for use on DDF with pitch of 12.7mm

Type No. 13B

Unique P/N: 7005
(see Ordering Code)

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High Density HDC43

- **HDC43 Straight latching crimp Socket**

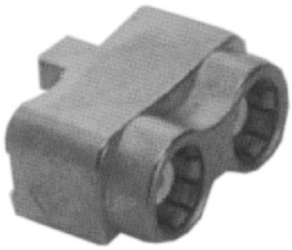
Cable Type	Type No.
2002	HDC 43/2FS
2003	HDC 43/3FS
3002/TZC	HDC 43/5FS
RG179B/U	HDC 43/4FS

Unique P/N: 7007
(see Ordering Code)

- **HDC43 Straight DDF Plug**
  for cables BT2002, 2003, 3002, RG179B/U

Cable Type	Type No.
2002	HDC 43/2FS
2003	HDC 43/3FS
3002/TZC	HDC 43/5FS
RG179B/U	HDC 43/4FS

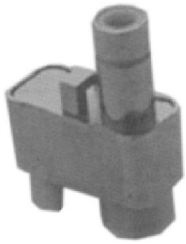
Unique P/N: 7006
(see Ordering Code)



- **HDC43 U Link with two Sockets** to link to 2 plugs on DDF with pitch of 10mm

Type No. 10A

Unique P/N: 7008
(see Ordering Code)

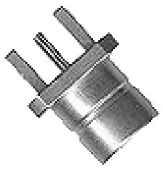


- **HDC43 U Link with two Sockets** and monitor plug for use on DDF with pitch of 10mm

Type No. 10B

Unique P/N: 7009
(see Ordering

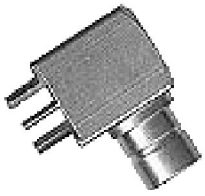
PCB Mounting Plugs for Type43/HDC43 Connectors



- **Type43/HDC43 Straight PCB Mounting Plug**

Type No. 43/1D

Unique P/N: 7003
(see Ordering Code)



- **Type43/HDC43 Right Angle PCB Mounting Plug**

Type No. 43/1E

Unique P/N: 7000
(see Ordering Code)

- **HDC43 Straight PCB Edge Mount DDF Plug**

Unique P/N: 7011
(see Ordering Code)

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Cable Groups to Cable Type Cross Reference

Group	Nom. Impedance (Ohms)	Cable Type
AA	50	RG58C/U, RG142B/U, URM43, URM76, Thinnernet
AB	75	RG59B/U, RG140/U, URM90
AC	75	RG210/U, URM96
AC	93	RG62A/U
AD	50	RG174/U, RG188A/U, RG316/U, URM95
AE	50	RG58/U
AF	75	RG179B/U
AG	75	BT2002
AH	75	PSF 1/3M
AJ	50	Ethernet
AK	50	RG213/U
AL	75	BT3002
AM	75	PSF1/2
AN	50	RG178B/U
AP	75	S-02YCCY 0.51/2.3
AR	75	BT2003
AS	75	RG6
AW	50 }	Use to indicate nominal impedance where cable type is not applicable
AX	75 }	2YCY
AY	75 }	

NOTE: Panel Sockets, Bulkhead Sockets, PCB Sockets, Adaptors and Terminators require to be matched for impedance, therefore the appropriate Cable Group AW or AY needs to be included in the Part Number.

NOTE: Use ‘ZZ’ where Nominal Impedance and Cable Group is not applicable.
e.g. Twinaxial Connectors.

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Cable Type to Cable Group Cross Reference

Cable Type	Cable Group	Nom. Impedance
BT 2002	AG	75
BT 2003	AR	75
BT 3002	AL	75
Ethernet	AJ	50
PSF 1/2	AM	75
PSF 1/3M	AH	75
RG58/U	AE	50
RG58C/U	AA	50
RG59B/U	AB	75
RG62A/U	AC	93
RG140/U	AB	75
RG142B/U	AA	50
RG174/U	AD	50
RG178B/U	AN	50
RG179B/U	AF	75
RG188A/U	AD	50
RG210/U	AC	75
RG213/U	AK	50
RG316/U	AD	50
S-02YCCY0.51/2.3	AP	75
Thinnernet	AA	50
URM43	AA	50
URM76	AA	50
URM90	AB	75
URM95	AD	50
URM96	AC	75
RG6	AS	75
2YCY	AX	75

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Coaxial Insulator Material Options

Key:

D
T = DELRIN
P = TEFLON (PTFE)
V = PBT
L = VALOX
N/A = POLYPROPYLENE
= Not available

NOTE: The use of Standard materials provides the most cost effective product.

Series	Unique P/N	Standard	Options	Series	Unique P/N	Standard	Options
BNC	1001	D	T	BNC	1025	L	N/A
BNC	1002	D	T	BNC	1025	L	N/A
BNC	1003	D	T	BNC	1026	T	N/A
BNC	1004	D	T	BNC	1028	L	N/A
BNC	1005	D	T	BNC	1029	D	T
BNC	006	D	T	BNC	1030	D	T
BNC	1007	P	N/.A				
BNC	1008	T	N/A	TNC	2000	D	T
BNC	1009	D	T	TNC	2001	D	T
BNC	1010	D	T	TNC	2002	D	T
BNC	1011	D	T	TNC	2003	D	T
BNC	1012	D	T	TNC	2004	D	T
BNC	1013	T	N/A	TNC	2005	D	T
BNC	1014	T	N/A	TNC	2006	D	T
BNC	1015	D	T	TNC	2007	T	N/A
BNC	1016	D	T	TNC	2008	D	T
BNC	1017	T	N/A	TNC	2010	T	N/A
BNC	1018	T	N/A	SMA	ALL	T	
BNC	1019	D	T	TWINAX	ALL P/N's	P	N/A
BNC	1020	V	N/A	SMB	ALL	T	
BNC	1021	L	N/A	N SERIES	ALL P/N's	T	N/A
BNC	1022	L	N/A				
BNC	1023	D	T	ADAPTORS	ALL P/N's	T	N/A
				TYPE 43	ALL P/N's	T	N/A
				MCX	ALL P/N's	T	N/A
				1.0/2.3	ALL P/N's	T	N/A
				1.6./5.6	ALL	T	N/A

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Ordering Code

X B D - 1001 - N G AA

Series Indicator:
X = Coaxial Connectors

Product Identifier:
A = Inter series Adaptors
B = BNC series
C = SMA series
D = SMB series
F = Type 43
G = 1.0/2.3 series
H = 1.6/5.6 series
J - MCX series
N - N series
T - TNC series
W - Tw inaxial series

Insulator Material:
D = Acetal - Delrin (-25°C to 90°C)
T = PTFE - Teflon (-65°C to 125°C)
P = PBT
V = Polyester - Valox
L - Polypropylene

See notes on Insulator material options

Unique Number:
see individual product illustrations

Body Finish:
N - Nickel (standard)
G = Gold Plated
other finishes available

Contact Plating:
G = Gold Flash over Nickel
S = Silver
B - Selective plating - Gold Flash on the mating surface, Silver on contact tails

Cable Group:
See information page

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