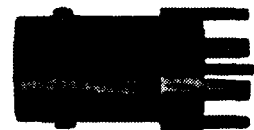
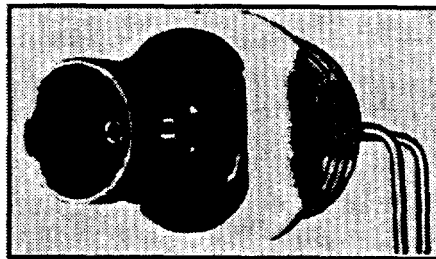
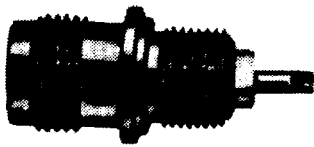
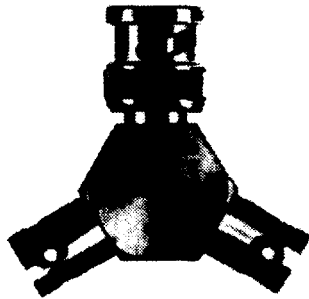




RF Coaxial Connectors

N/BNC/TNC/ TWIN-AX



Ava Electronics Corp. • 4000 Bridge Street • Drexel Hill, PA 19026 • (610) 284-2500 • 800-331-8838 • Fax (610) 259-8379



AVAES00017

Thank you for your interest in AVA Electronics Corporation.

Founded in 1962, AVA is a self-contained and fully integrated U.S. manufacturer of broad line coaxial connectors and related cable assembly products. Our coaxial connector product lines are widely used by major OEM's worldwide and numerous national distributors.

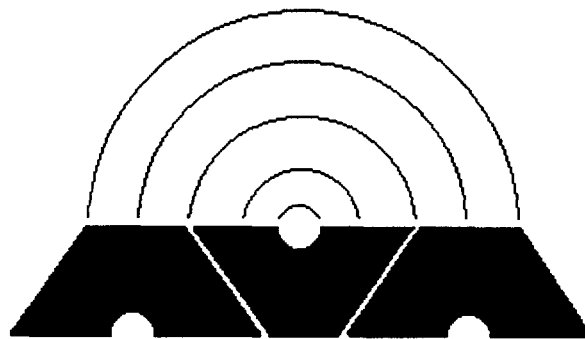
AVA's in-house automated manufacturing facility enhances our ability to provide our customers with fast turnaround and competitive pricing for their custom as well as standard design requirements.

Our goal is complete customer satisfaction by delivering cost efficient quality products in a timely manner.

This is only a brief overview of our capabilities. Please contact us for further information.

*AVA Electronics Corporation
4000 Bridge Street
Drexel Hill, PA 19026*

*Phone: 610-284-2500
Toll Free: 800-331-8838
Fax: 610-259-8379*



Connecting to the Future

General description

The AVA line of F Connectors provides an inexpensive coaxial interconnection which is suitable for use in a variety of applications, such as: CATV, MATV, and home satellite receivers. Two series are available – threaded and push-on.

Features

- Mates with most F-series connectors
- Threaded series provides reliable coupling
- Push-on series provides quick connect/disconnect
- Easy to install

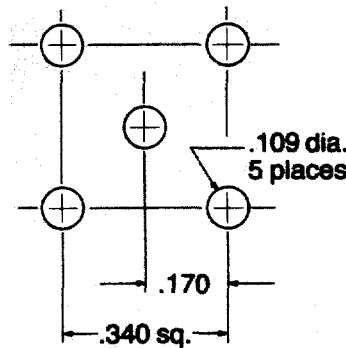
Materials

- Body components made from solid brass stock
- Bright nickel-, cadmium-, silver-, or tin-plated body components available
- Phosphor bronze, beryllium copper or brass contacts available
- Gold, tin, or silver contact platings available
- Nylon or polypropylene dielectrics available

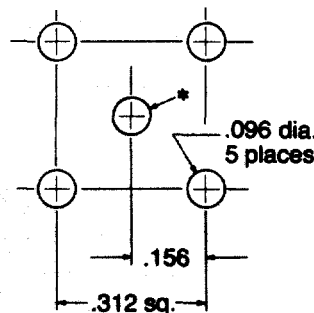
Electrical specifications

- Frequency range: DC to 1 GHz
- Impedance: Nonconstant
- Voltage rating: 250 VRMS

F Connectors for PCB Mount Applications

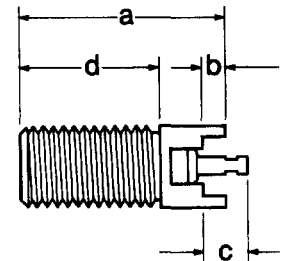


Recommended PCB Hole Pattern
(Figs. 1 & 2 only)

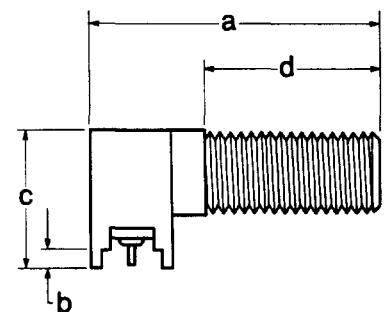


Alternate PCB Hole Pattern
(All figures)

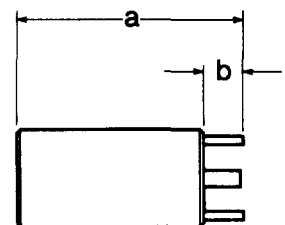
*.062 dia. for 139020 – Fig. 3



Female PCB Mount Connector
Fig. 1 – Threaded Series



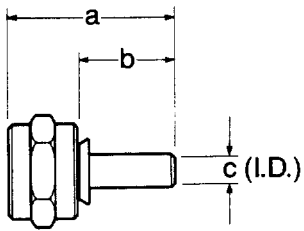
Female Right Angle PCB Mount Connector
Fig. 2 – Threaded Series



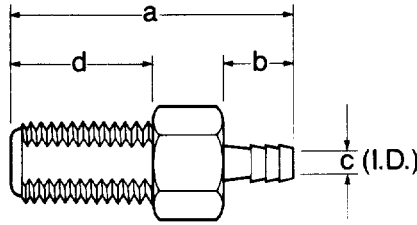
Male PCB Mount Connector
Fig. 3 – Push-on Series

Series	Gender	Fig.	a	b	c	d	Cat. No.	Notes
Threaded	F	1	1.00	.10	.10	.53	133003	
Threaded	F	1	.93	.11	.20	.64	139050	No hardware.
Threaded	F	1	1.00	.15	.15	.53	139103	
Threaded	F	1	2.00	.13	.13	1.25	139110	No hardware.
Threaded	F	2	1.30	.12	.64	.80	133030	Chassis cutout C (p. 3). No hardware.
Push-on	M	3	1.00	.18	—	—	139020	

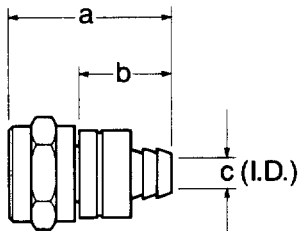
F Connectors for Cable Applications



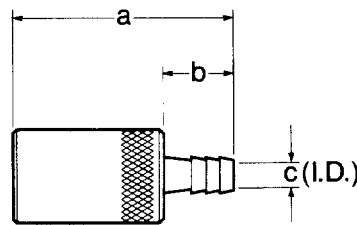
Male Cable Connector
Fig. 4 – Threaded Series



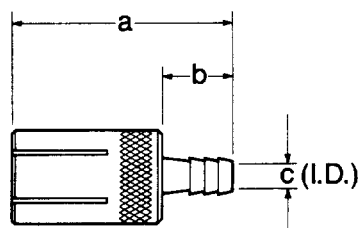
Female Cable Connector
Fig. 7 – Threaded Series



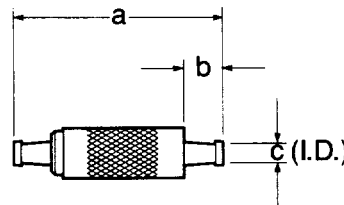
Male Cable Connector with Integral Crimp Ring
Fig. 5 – Threaded Series



Male Cable Connector
Fig. 8 – Push-on Series



Male Cable Connector, Push-on Coupling
Fig. 6 – Threaded Series



Permanent In-line Splice Connector
Fig. 9

Cost-effective quality construction

All AVA Connectors are manufactured on-site and in volume to bring you high-quality construction at cost-effective prices. Delivery on all standard products is off-the-shelf to four weeks.

AVA product line

AVA manufactures to stringent quality control standards. The full AVA product line features BNC, TNC, UHF, F, N, BNC TWIN-AX and Coaxial Balun connectors. Accessories include Cable Assemblies, Wall Plates, and Adapters. Custom designs for specific requirements are available upon request.

Ordering information

For complete pricing and ordering information, call us now at 1-800-331-8838. In Pennsylvania, call 215-284-2500.

AVA products are made in the USA.

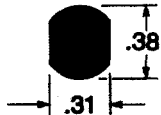
Cable	Series	Gender	Fig.	a	b	c	d	Cat. No.	Notes
RG-6/U	Threaded	M	4	.72	.40	.19	—	100001	
RG-6/U	Threaded	M	5	.73	.41	.19	—	100010	Integral crimp ring.
RG-6/U	Threaded	M	4	.73	.31	.19	—	100021	Die-cast body.
RG-59/U	Threaded	M	4	.72	.40	.15	—	103001	
RG-59/U	Threaded	M	5	.72	.40	.15	—	103010	Integral crimp ring.
RG-59/U	Threaded	M	6	.94	0	.22	—	103030	Push-on coupling. Twist-on cable attachment.
RG-59/U	Threaded	M	6	1.00	.31	.15	—	103041	Push-on coupling.
RG-59/U	Threaded	F	7	1.26	.30	.15	.64	113001	Chassis cutout B (p. 3). Crimp ring but no hardware.
RG-59/U	Push-on	M	8	1.35	.24	.15	—	103021	Integral male contact.
RG-59/U	—	—	9	1.87	.35	.15	—	161601	Permanent in-line splice.
RG-179B/U	Threaded	M	4	.86	.54	.13	—	109010	Direct crimp.
Belden 8218	Threaded	M	4	.67	.36	.11	—	109030	
Teledyne 7211659F-2	Threaded	M	4	.71	.40	.11	—	109041	

F Connectors for Chassis Mount Applications

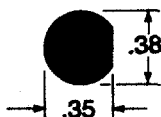
Chassis Cutout Details



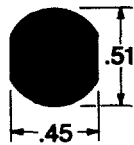
Cutout A ($\frac{3}{8}$)



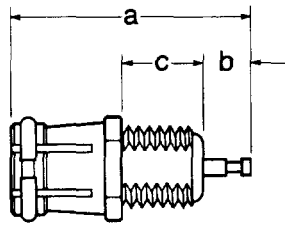
Cutout B ($\frac{3}{8}$ DD)



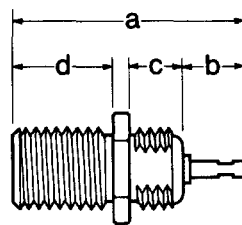
Cutout C ($\frac{3}{8}$ D)



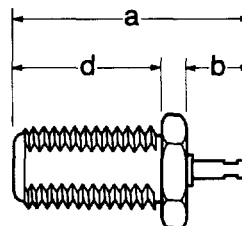
Cutout D ($\frac{1}{2}$ DD)



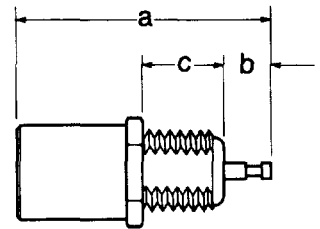
Male Chassis Mount Connector, Push-on Coupling
Fig. 10 – Threaded Series



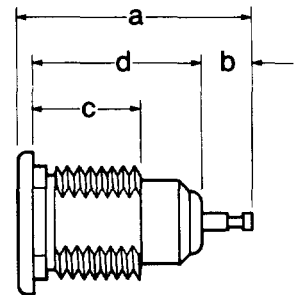
Female Chassis Mount Connector
Fig. 11 – Threaded Series



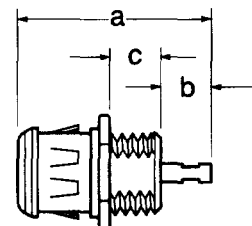
Female Chassis Mount Connector
Fig. 12 – Threaded Series



Male Chassis Mount Connector
Fig. 13 – Push-on Series



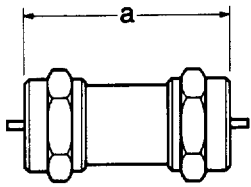
Male Chassis Mount Connector
Fig. 14 – Push-on Series



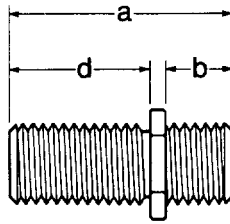
Female Chassis Mount Connector
Fig. 15 – Push-on Series

Series	Gender	Fig.	a	b	c	d	Chassis Cutout	Cat. No.	Notes
Threaded	M	10	1.08	.21	.37	—	B	120004	Push-on coupling.
Threaded	M	10	1.13	.26	.37	—	B	129014	Push-on coupling. Integral sealing gasket.
Threaded	F	11	1.03	.28	.25	.43	B	130003	
Threaded	F	11	1.02	.28	.27	.38	B	130013	Die-cast body.
Threaded	F	11	1.02	.28	.35	.29	B	130033	
Threaded	F	12	1.00	.27	—	.63	A	131003	
Threaded	F	12	1.11	.26	—	.74	A	131033	BeCu center contact.
Threaded	F	12	1.11	.26	—	.74	A	131093	Phosphor bronze center contact.
Threaded	F	12	1.01	.28	—	.63	B	131013	
Threaded	F	12	1.62	.24	—	1.28	B	131053	
Threaded	F	12	1.62	.22	—	1.29	C	131060	No hardware.
Push-on	M	13	1.04	.20	.32	—	B	120023	
Push-on	M	13	1.04	.20	.32	—	B	129001	.062" dia. center contact.
Push-on	M	14	1.01	.20	.46	.75	D	120014	
Push-on	F	15	1.00	.26	.25	—	B	130023	
Push-on	F	15	1.10	.24	.38	—	B	139123	Includes ground lug.

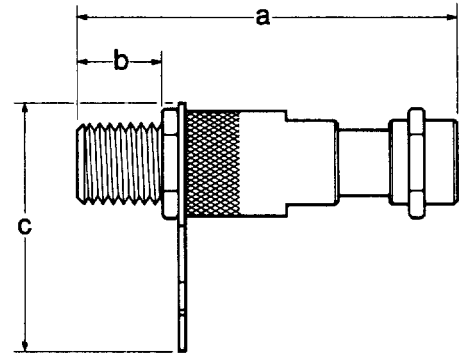
In Series Adapters for Threaded F Connectors



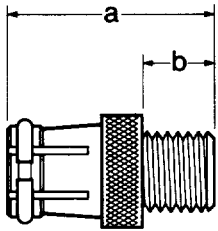
Male-Male Adapter
Fig. 16 – Threaded Series



Female-Female Adapter
Fig. 18 – Threaded Series



Male-Female Adapter with Integral Ground Lug
Fig. 19 – Threaded Series

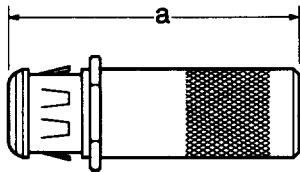


Male-Female Adapter, Push-on Coupling
Fig. 17 – Threaded Series

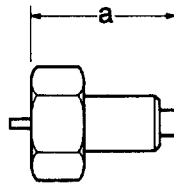
Gender	Fig.	a	b	c	d	Chassis* Cutout	Cat. No.	Notes
M – M	16	1.22	—	—	—	—	151500	
M – F	17	.95	.31	—	—	—	151620	Push-on coupling.
F – F	18	.97	.28	—	.63	A	132003	
F – F	18	.97	.28	—	.63	A	161600	S/A above except hardware not included.
M – F	19	1.72	.37	1.16	—	—	151690	Integral ground lug.

*See chassis cutout details, page 3.

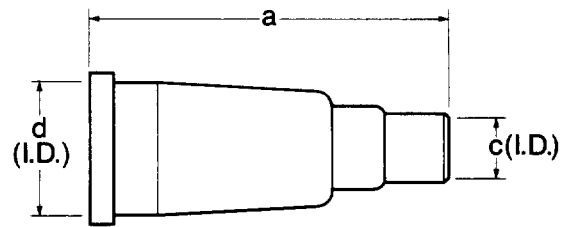
F Connector Accessories



75Ω Female Terminator
Fig. 20 – Push-on Series



75Ω Male Terminator
Fig. 21 – Threaded Series



Neoprene Boot
Fig. 22

Description	Fig.	a	b	c	d	Cat. No.
75 ohm push-on female terminator	20	1.37	—	—	—	177600
75 ohm threaded male terminator	21	.66	—	—	—	177500
Neoprene boot	22	1.56	—	.24	.44	177000

F Connector Between Series Adapters

NOTE: For photo and additional description, see AVA Coaxial Adapters – Catalog No. 86-1

AVA/PN	Description
132013	F Push-On Jack to F Jack
165500	Phono Plug to F Jack
165600	Phono Jack to F Jack
251600	BNC Plug to F Jack
261600	BNC Jack to F Jack

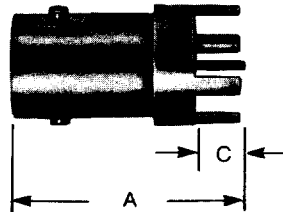
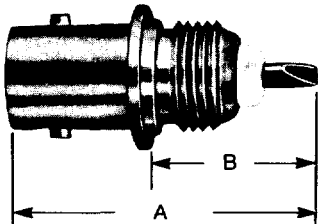
AVA/PN	Description
351600	UHF Plug to F Jack
155600	Phono Jack to F Plug
251500	BNC Plug to F Plug
261501	BNC Jack to F Plug

Product information is of general nature. Specifications subject to change without notice. Printed in USA FCON 488

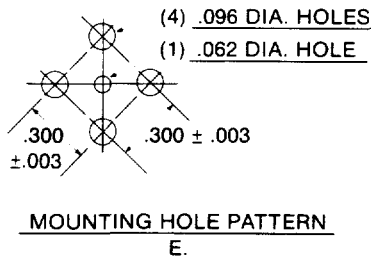
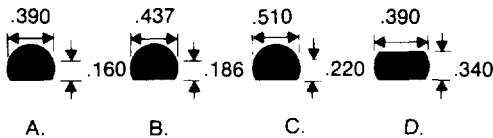


BNC female connectors

Chassis Mount | Low Profile PC Board Mount



CHASSIS CUTOUT DETAILS



CATALOG NUMBER	UG TYPE	A	B	C	CHASSIS CUTOUT
230004	UG 625 B/U	1.05	.60	N/A	B
230014		1.05	.60	N/A	B
230024	UG 657 /U	1.30	.70	N/A	D
230034	UG 1094 /U	1.05	.60	N/A	A
230044		1.05	.60	N/A	A
230054	UG 1094 A/U	1.18	.70	N/A	A
230064		1.05	.60	N/A	C
233000		.82	N/A	.18	E

FEATURES

- Standard UG format
- Silver contact results in excellent solderability and improved electrical characteristics
- Competitively priced
- Can be modified to any customer's requirements
- Off-the-shelf delivery

ELECTRICAL CHARACTERISTICS

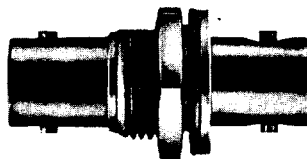
Impedance: 50 OHMS
Nominal
Frequency Range: 0-4 GH
Voltage Rating: 500 Volts

MATERIALS

Body: Brass CDA 360 with Bright Nickel Plating
Insulator: Teflon
Contacts: Beryllium Copper CDA 172 with Silver Plating

All BNC connectors have a 2-stud bayonet lock mating interface.

Adapters



BNC Cable Assemblies

Unlimited range of custom cables can be provided to meet any customer's specifications

Full line of between-the-series adapters such as BNC, F, UHF and Phono.

Terminators



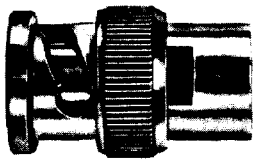
Standard models available in 50 and 75 OHMS. Low VSWR. Wide frequency range. Now available in both commercial and precision type 1% with or without chain.



BNC male connectors



Compression Type



FEATURES

- Standard UG format
- Controlled impedance performance
- Tight RFI integrity
- Reliable performance for video, computer and two-way communication applications
- Field serviceable
- Off-the-shelf delivery

CATALOG NUMBER	UG TYPE	CABLE TYPE
202000	UG 88/U	RG55/U, RG58/U
203020	UG 260/U	RG59/U RG62/U

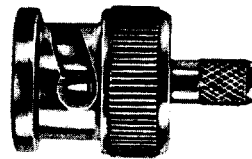
MATERIALS

Body: Brass CDA 360 with Bright Nickel Plating
 Insulator: Teflon
 Contacts: Brass CDA 360 with Silver Plating
 Crimp Ferrule: Brass CDA 360 with Bright Nickel Plating

All BNC connectors have a 2-stud bayonet lock mating interface.

All connectors can be modified to meet any customer's requirements.

Crimp-on



FEATURES

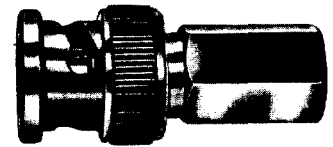
- Installs in 30 seconds or less
- Extended crimping area provides maximum cable retention
- Unique contact design assures positive alignment
- No soldering required
- Crimp tools available
- Off-the-shelf delivery

CATALOG NUMBER	CABLE TYPE
202021	RG58/U
202031	RG58/U TEFLON
203001	RG59/U, RG62/U
203011	RG59/U TEFLON WANG E-73104
204001	RG62A/U TEFLON
205001	RG174/U

ELECTRICAL CHARACTERISTICS

Impedance: 50 OHMS
 Nominal
 Frequency Range: 0-4 GH
 Voltage Rating: 500 Volts

Twist-on



FEATURES

- No solder or special tools needed
- One-piece construction—no loose parts
- Polypropylene insulator
- Machined phos-bronze center contact insures maximum electrical conductivity
- Silver-plated center contact
- Reduced body length. Ideal for applications where space is limited
- Off-the-shelf delivery

CATALOG NUMBER	CABLE TYPE
203040	RG59/U, RG62/U

BNC Cable Assemblies



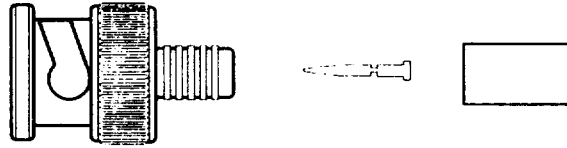
Standard high quality cable assemblies provided in 3, 6 and 12 ft. Unlimited range of custom cables available to meet any unique requirement.



CAPTIVATED CONTACT BNC CRIMP-ON'S

Data Sheet

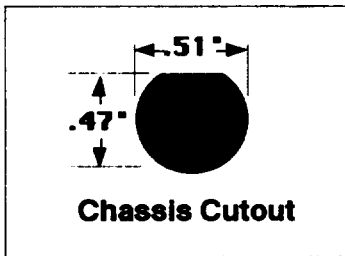
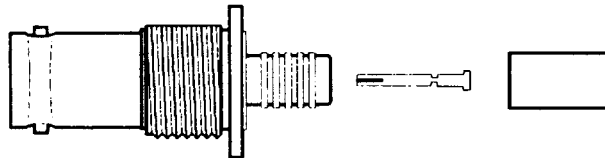
Electrical:
Impedance: 50 ohms**
Voltage rating: 500VAC



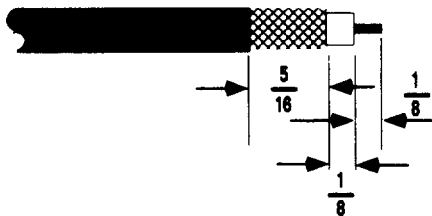
Materials:
Body: Nickle plated brass
Insulator: Polypropelene
Contacts:
 Male:brass
 Female:Phosphor Bronze
Contact plating: silver

Cable Type	Jacket	O.D. Range	Center Conductor	AVA Part No.
RG58,141	PVC	.185-.215	20 SLD/STD, 18 SOLID	202161
58,303	Teflon™	.165-.197	20 SLD/STD, 18 SOLID	202171
RG59,62	PVC	.230-.260	22 SLD/STD, 20 SOLID	203171
59,62	Teflon™	.200-.232	22 SLD/STD, 20 SOLID	204041
MINI 62	PVC	.135-.168	30 STD, 20 SOLID	204151

**75 Ohms also available



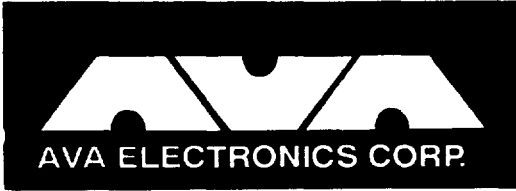
Cable Type	Jacket	O.D. Range	Center Conductor	AVA Part No.
RG58,141	PVC	.185-.215	20 SLD/STD, 18 SOLID	218035
58,303	Teflon™	.165-.197	20 SLD/STD, 18 SOLID	212015
RG59,62	PVC	.230-.260	22 SLD/STD, 20 SOLID	231025
59,62	Teflon™	.200-.232	22 SLD/STD, 20 SOLID	231055
MINI 62	PVC	.135-.168	30 STD, 20 SOLID	216015



Cable Preparation

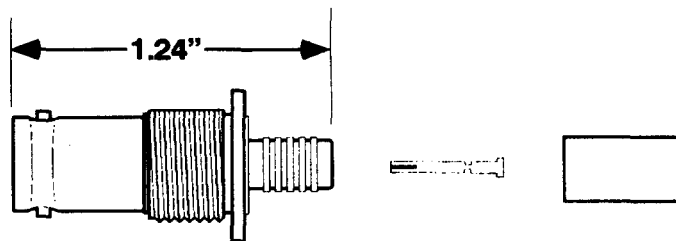


Cable Type	Jacket	O.D. Range	Center Conductor	AVA Part No.
RG58,141	PVC	.185-.215	20 SLD/STD, 18 SOLID	218021
58,303	Teflon™	.165-.197	20 SLD/STD, 18 SOLID	212001
RG59,62	PVC	.230-.260	22 SLD/STD, 20 SOLID	213021
59,62	Teflon™	.200-.232	22 SLD/STD, 20 SOLID	213061
MINI 62	PVC	.135-.168	30 STD, 20 SOLID	216001



ISOLATED CHASSIS MOUNTED Data Sheet BNC CABLE CONNECTORS

AVA's isolated chassis mounted crimp-on connectors are similar to our standard connectors, however the standard metal threads have been replaced with tough plastic threads which isolate the metal body from ground. This makes them ideal for use in LAN's where EMI and RFI must be reduced.



Cable Type	Jacket	O.D. Range	Center Conductor	PART NUMBER	
				50 Ω	75 Ω
Belden 8281, RG6	PVC	.295-.315	20 SLD/STD, 18 SOLID	231625	§
RG58,141	PVC	.185-.215	20 SLD/STD, 18 SOLID	231615	—
58,303	Teflon™	.165-.197	20 SLD/STD, 18 SOLID	231635	—
RG59,62	PVC	.230-.260	22 SLD/STD, 20 SOLID	231605	231725
59,62	Teflon™	.200-.232	22 SLD/STD, 20 SOLID	231655	§
MINI 62	PVC	.135-.168	30 STD, 20 SOLID	231665	§
RG174	PVC	.098-.106	26 STRANDED	231675	§
RG179	Teflon™	.098-.106	30 STRANDED	231705	231735

§ Consult factory

Electrical:

Impedance: 50 and 75 ohms

Voltage rating: 500VAC

Materials:

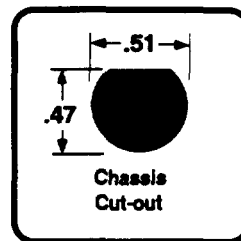
Body: Nickle plated brass

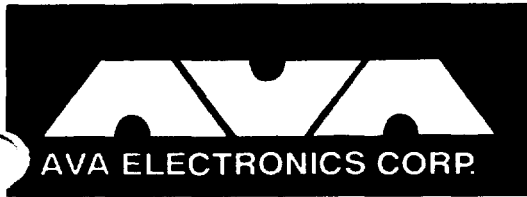
Outer Insulators: Valox™

Internal Insulator: Teflon™ or TFE

Contacts: Female-Beryllium copper or phos bronze

Contact plating: silver standard, gold optional





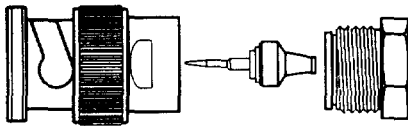
75 OHM BNC CONNECTORS

Data Sheet

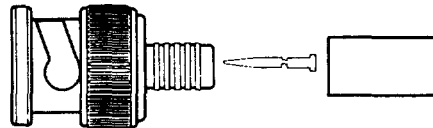
AVA's 75 ohm crimp-on connectors use readily available tooling, and are designed to provide an improved impedance match for telecommunications, video, and high speed computer networks.

Electrical:
Impedance: 75 ohms nominal
Voltage rating: 500VAC

Materials:
Body: Nickle plated brass
Internal Insulator: Teflon™ or TFE
Contacts: Female-Beryllium copper or phos bronze
Male: brass
Contact plating: gold standard, silver optional

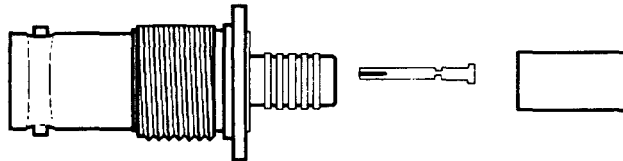
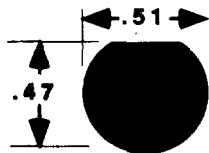


Compression

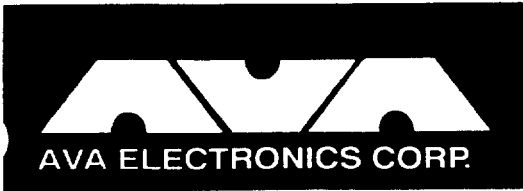


Crimp-on

Cable Type	Jacket	O.D. Range	Center Conductor	PART NUMBER	
				Compression	Crimp-on
6 Type	PVC	.295-.312	20 SLD/STD, 18 SOLID	200110	200121
RG59,62	PVC	.230-.260	22 SLD/STD, 20 SOLID	203180	203201
59,62	Teflon™	.200-.232	22 SLD/STD, 20 SOLID	203190	203211
MINI 59	PVC	.135-.168	26 SLD, 27STD	208110	208131
RG179	PVC	.098-.105	30 STD/SLD	208120	208141



Cable Type	Jacket	O.D. Range	Center Conductor	AVA Part No.
6 Type	PVC	.295-.312	20 SLD/STD, 18 SOLID	231745
RG59,62	PVC	.230-.260	22 SLD/STD, 20 SOLID	231755
59,62	Teflon™	.200-.232	22 SLD/STD, 20 SOLID	231765
MINI 59	PVC	.135-.168	26 SLD, 27STD	231775
RG179	PVC	.098-.105	30 STD/SLD	231785



TERMINATORS and ATTENUATORS

Data Sheet

AVA has been manufacturing quality terminators and attenuators for over twenty years. We can also supply customized RF connector products engineered to suit your specific application.

We specialize in the production of custom designs, all products shown here are manufactured by AVA at our plant in Drexel Hill, Pennsylvania.



BNC Attenuators 2 Watt Average

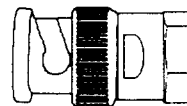
Attenuation in dB	50 OHM	75 OHM	93 OHM
1	*	*	*
3	252660	*	277600
6	252661	*	277601
9	*	*	277606
10	252662	*	277602
12	*	*	*
20	252663	*	277603

*consult factory for wattage and part number

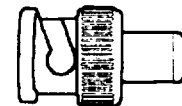
Electrical:

Impedance: 50 ,75 , and 93 ohms

Voltage rating: 500VAC



Standard



Compact

BNC Terminators 1/2 Watt 1%

Type	50 OHM	75 OHM	93 OHM
Standard	277040	277050	279020
Standard w/chain	277020	277030	277060
Compact	277140	277150	277160

Materials:

Body: Nickle plated brass

Outer insulators: Valox™

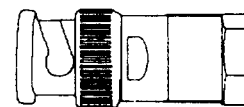
Internal insulator: Teflon™ or TFE

Contacts: Female- BeCu or Phos Bronze

Male:brass

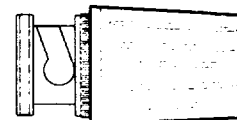
Contact plating: silver standard, gold optional

Chain: 3" bead



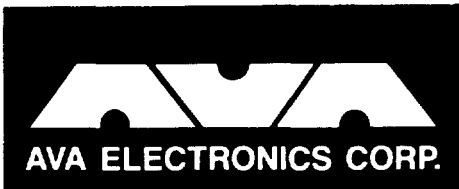
BNC Terminators 2 Watt 1%

50 OHM	75 OHM	93 OHM
277070	277090	277110



Insulated Color Coded BNC Terminators 1/2 Watt 1%

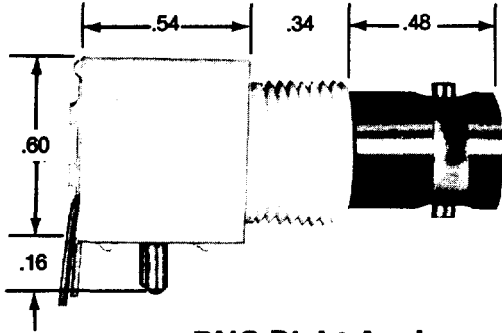
Type	50 OHM Green	75 OHM Gray	93 OHM Red
Cap only	277170	277180	277190
with chain	277210	277220	277230



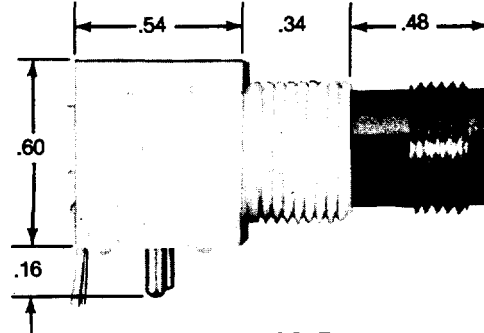
ISOLATED Female PC CONNECTORS

AVA ELECTRONICS CORP.

P.O. BOX 184, 4000 BRIDGE STREET • DREXEL HILL, PA 19026

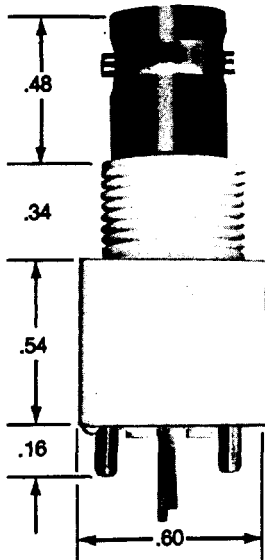


BNC Right Angle
AVA No. 233074
 With Mounting Posts (Shown)
AVA No. 233084
 With Self-Tapping Screws

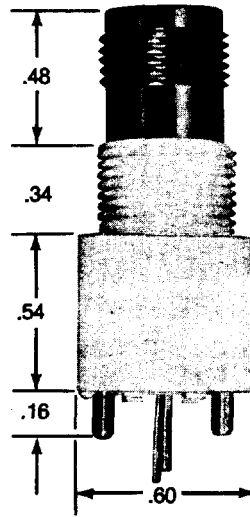


TNC Right Angle
AVA No. 633074
 With Mounting Posts (Shown)
AVA No. 633084
 With Self-Tapping Screws

**ALSO AVAILABLE
 IN LOW-PROFILE
 CONFIGURATION
 INFORMATION UPON REQUEST**



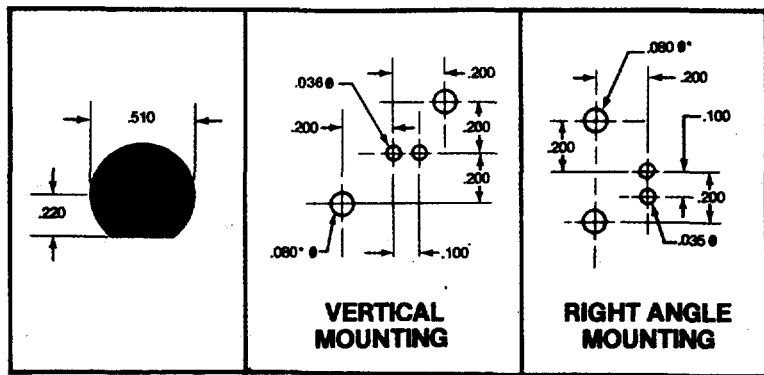
Vertical BNC
AVA No. 233104
 With Mounting Posts (Shown)
AVA No. 233094
 With Self-Tapping Screws



Vertical TNC
AVA No. 633104
 With Mounting Posts (Shown)
AVA No. 633094
 With Self-Tapping Screws

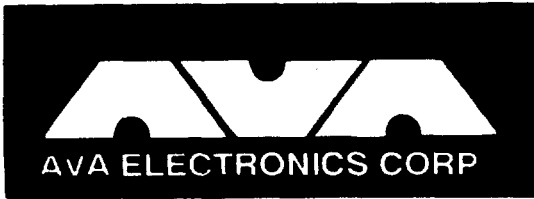
MOUNTING DETAILS

- Fully Isolated
- Body: Brass, Nickel Plated
- Contact: Brass, Silver Plated
- Ground Wire: Copper, Tin Plated
- Internal Insulator: Polypropylene
- Body Insulator: G.E. Valox
- Mounting Posts: Brass, Tin Plated
- Nominal Impedance: 50 OHMS
- Voltage Rating: 500 Volts
- Printed Circuit Board Mounting



CHASSIS CUTOUT

P.C. BOARD MOUNTING



FILTERED NETWORKING CONNECTORS

Data Sheet

Features: Designed to accommodate the limited space requirements of an IBM™ type board slot, the compact design also conserves space for other applications. A unique clip design on the 233784 eliminates the need for separate hardware, and permits an easy upgrade from the standard version when required. Available in both 50 and 75 ohm versions.

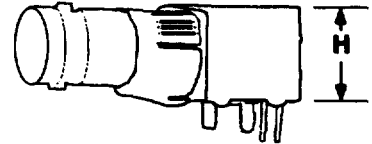
Filter: Provides 10,000pF distributed capacitance to ground from the cable shield. Compact and more effective than separate board mounted capacitors. Helps meet IEEE 802.x and CFR Title 47, Part 15. Unique clip design saves space, and requires no separate mounting hardware.

Materials:

- Body:** Machined brass, nickel plated
- Outer Insulators:** Valox™ and polycarbonate
- Internal Insulator:** Polyethylene
- Contact:** Beryllium copper or phosphor bronze tin, or gold plating

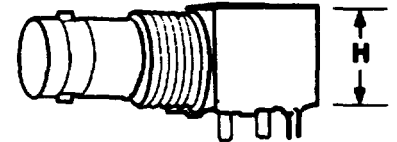
Electrical:

- Impedance:** 50 ohms (75 ohm available)
- Voltage rating:** 500VDC working, 1000V peak
- Capacitance:** 10,000 pF cable shield to ground



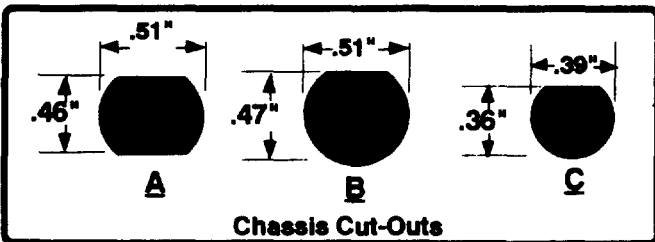
AVA P/N:233784	H=0.5"
AVA P/N:239784	H=0.5" 75Ω
AVA P/N:233600	H=0.6

designed for PC networking cards, uses LEXAN™ clip, requires no other hardware---cutout A or B

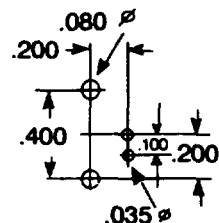


AVA P/N:233774	H=0.5"
AVA P/N:239774	H=0.5" 75Ω
AVA P/N:233614	H=0.6

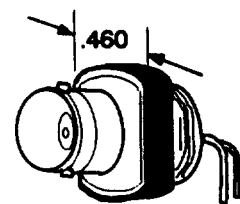
Hardware supplied. For use where space permits the use of hardware. ---Use cutout B



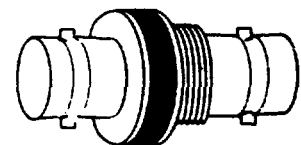
NOTE: Board and chassis layout are essentially identical to standard, non-filtered parts.



PC Board Mounting



AVA P/N:230714	Cutout A
AVA P/N:230724	Cutout C

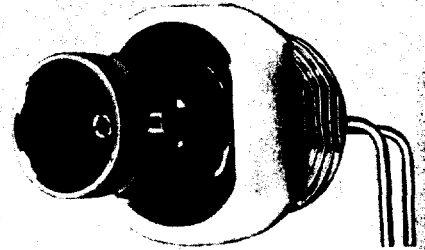
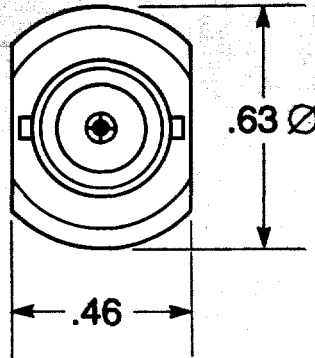


AVA P/N:262670	Cutout B
----------------	----------

Isolated BNC Connectors

Filter features

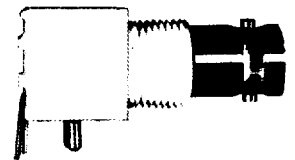
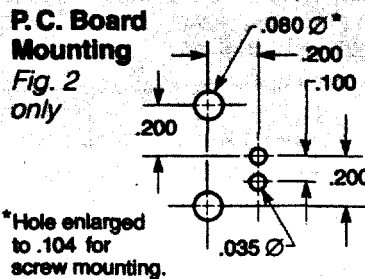
- One-piece machined brass body
- Gold- or silver-plated contact ensures maximum reliability
- Mates with all MIL-C-39012 Series BNC Connectors
- Distributed capacitance of .01 μ F to ground
- Transient suppression available
- Reduced width is compatible with IBM™ PC expansion slots
- Helps meet IEEE 802.x and CFR Title 47, Part 15, Subpart J



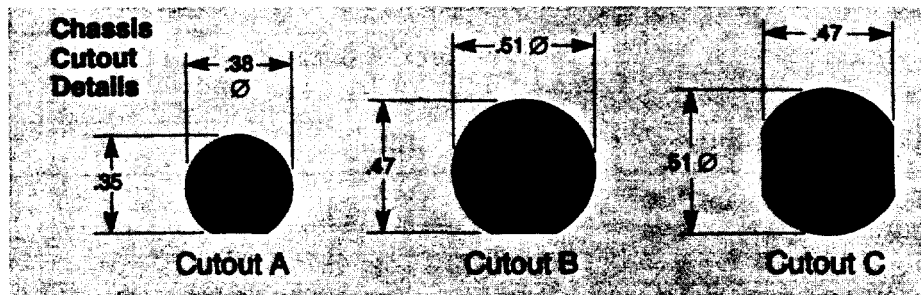
Isolated Female BNC Connector
"IBM backplane" mount with PCB leads
Fig. 1

General description

AVA local area network (LAN) interconnection products satisfy the most demanding needs of today's data-comm professional. Choose from a broad line of standard coaxial and twin-axial connector products. Or contact the AVA engineering team for custom products designed to meet your specifications.



Isolated Female BNC Right Angle PCB Connector
(shown with mounting posts)
Fig. 2



Isolated Female BNC Chassis Mount Connector
Fig. 3

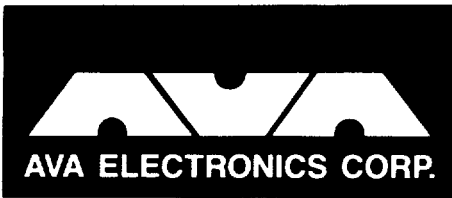
AVA Isolated BNC Connectors

Gender	Fig.	Cat. No.	Notes
F	1	239334	"IBM backplane" mount with PCB leads. Use chassis cutout A.
F	1	230124	"IBM backplane" mount with PCB leads. Use chassis cutout C.
F	1	230714	Ground filtered (.01 μ F) "IBM backplane" mount with PCB leads. 75 ohm impedance. Use chassis cutout C.
F	3	230084	Chassis mount. Use chassis cutout A.
F	3	230114	S/A above except for ground tab placement.
F	2	233074	PCB mount with posts. Use chassis cutout B.
F	2	233084	PCB mount with screws. Use chassis cutout B.
F-F	4	232014	Bulkhead splice adapter. Use chassis cutout B.
F-F	4	262670	Ground filtered (.01 μ F) bulkhead splice adapter. Use chassis cutout B.



Isolated Female-Female BNC Bulkhead Splice Adapter
Fig. 4

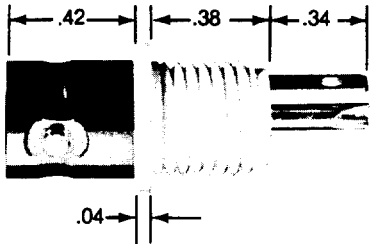
IBM is a trademark of International Business Machines Corp.



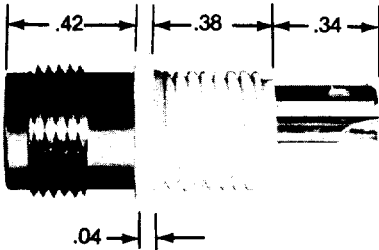
ISOLATED Female CONNECTORS and ADAPTERS

AVA ELECTRONICS CORP.

P.O. BOX 184, 4000 BRIDGE STREET • DREXEL HILL, PA 19026



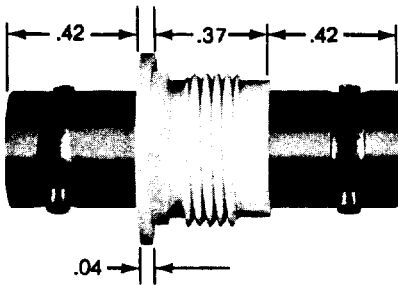
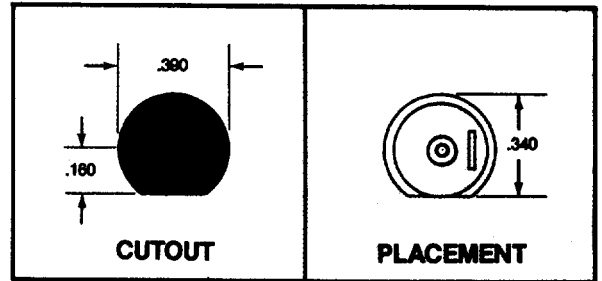
BNC Chassis Mounted
AVA No. 230084



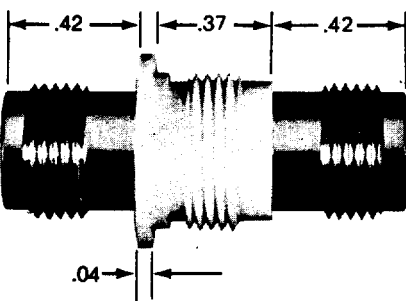
TNC Chassis Mounted
AVA No. 630084

ISOLATED CHASSIS CONNECTORS

- Body: Brass, Nickel Plated
- Contact: Beryllium Copper, Silver Plated
- Ground Tab: Brass, Silver Plated
- Internal Insulation: G.E. Valox
- Outer Insulator: G.E. Valox
- Nominal Impedance: 50 OHMS
- Voltage Rating: 500 Volts



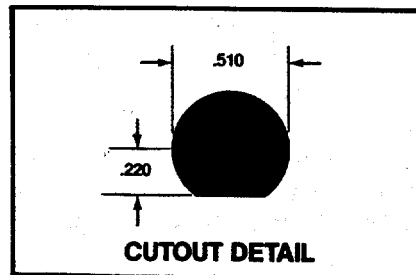
BNC Bulkhead Adapter
AVA No. 232014



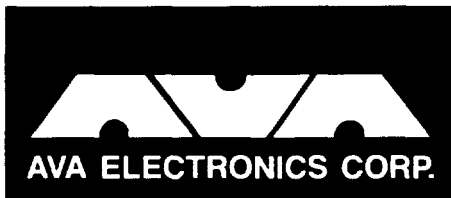
TNC Bulkhead Adapter
AVA No. 632014

ISOLATED BULKHEAD ADAPTERS

- Body: Brass, Nickel Plated
- Contact: Beryllium Copper, Silver Plated
- Internal Insulator: TFE(Teflon*)
- Outer Insulator: G.E. Valox
- Nominal Impedance: 50 OHMS
- Voltage Rating: 500 Volts



*DuPont trademark



BNC TWIN-AXIAL Connectors

Features/benefits

- Silver-plated, machined contacts ensure maximum reliability
- Quick connect/disconnect
- Weatherproof
- Mates with most BNC TWIN-AXIAL Connectors
- One-piece machined brass body
- Standard crimp tooling

Materials

- Body: brass with high-luster nickel plating
- Dielectric: Tefzel or equivalent
- Contacts: male – brass with silver plating; female – phosphor bronze with silver plating
- Gaskets: silicone rubber

Electrical specifications

- Impedance: intended for use with 78-ohm twin conductor cables
- Frequency range: DC-100 MHz
- Voltage rating: 500 volts rms

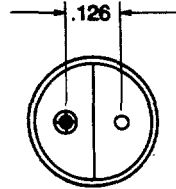
Cost-effective quality construction

All AVA Connectors are manufactured on-site and in volume to bring you high-quality construction at cost-effective prices. Delivery on all standard products is off-the-shelf to four weeks.

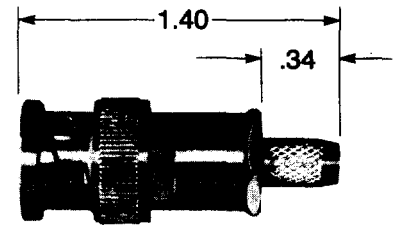
Applications

The AVA line of BNC TWIN-AXIAL connectors is specially designed for balanced, low level, and high sensitivity applications. Designed in accordance with MIL-C-39012, these rugged connectors provide an interconnection method which is suitable for use in a variety of applications, such as: business computers, peripheral equipment, and process control systems. Though developed for use on military aircraft (MIL-STD-1553, Multiplex Data Bus), virtually any electronic system demanding a superior, low noise, signal transmission medium can achieve a highly reliable mode of operation.

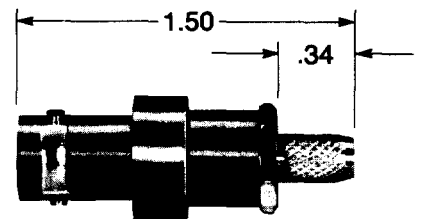
AVA products are made in the USA.



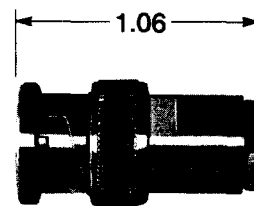
Mating face
End view



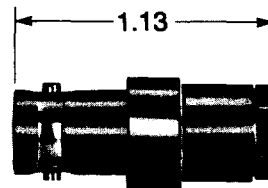
Male Cable Crimp-on Connector AVA No. 208501



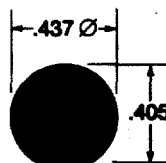
Female Cable Crimp-on Connector AVA No. 218511



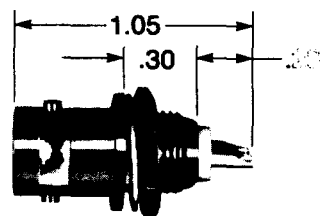
Male Cable Compression Connector AVA No. 208510



Female Cable Compression Connector AVA No. 218500

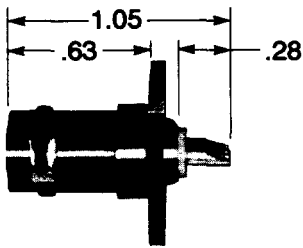


Chassis Cutout
Detail (230504)

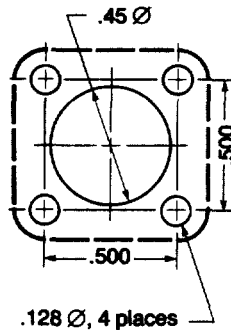


Female Chassis Mount Connector AVA No. 230504

BNC TWIN-AXIAL Connectors



Female Flange Mount Connector AVA No. 231500



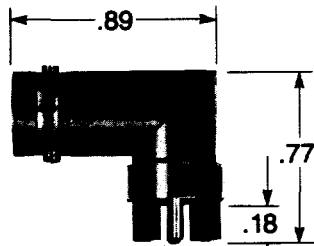
Chassis Cutout Detail
(231500)

AVA product line

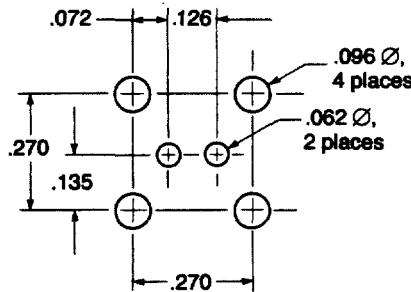
AVA manufactures to stringent quality control standards. The full AVA product line features BNC, TNC, UHF, F, N, BNC TWIN-AX and Coaxial Balun connectors. Accessories include Cable Assemblies, Wall Plates, and Adapters. Custom designs for specific requirements are available upon request.

Ordering information

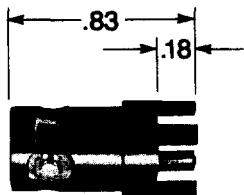
For complete pricing and ordering information, call us now at 1-800-331-8838. In Pennsylvania, call 215-284-2500.



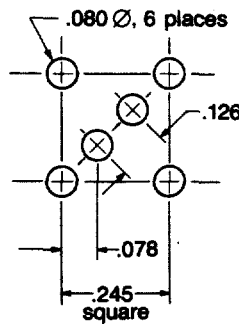
Female Right Angle PCB Mount Connector AVA No. 233510



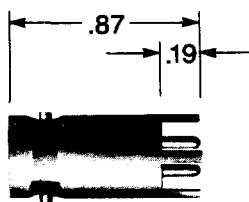
Recommended PCB Hole Pattern
(233500 & 233510)



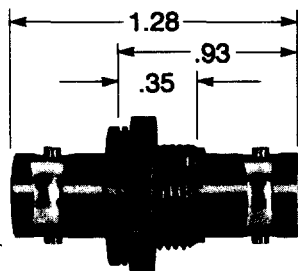
Female PCB Mount Connector AVA No. 233500



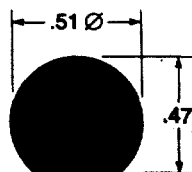
Recommended PCB Hole Pattern
(239060)



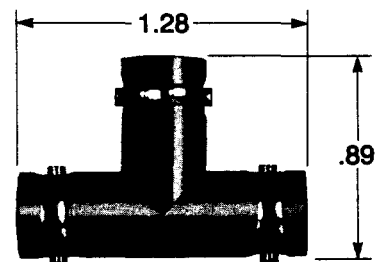
Female PCB Mount Connector AVA No. 239060



Female Feed-through Adapter AVA No. 232504



Chassis Cutout Detail
(232504)



Female Tee Adapter
AVA No. 277500



N female connectors

Chassis Mount

Panel Mount

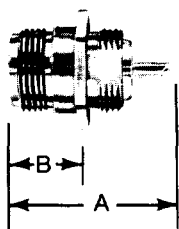


FIG. 1

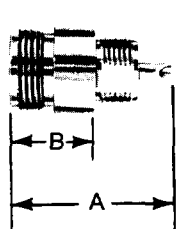


FIG. 2

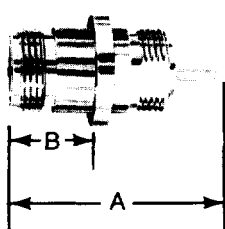


FIG. 3

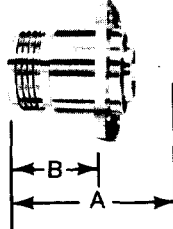
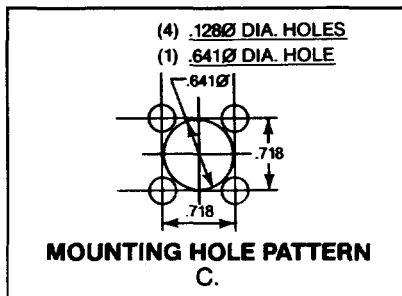
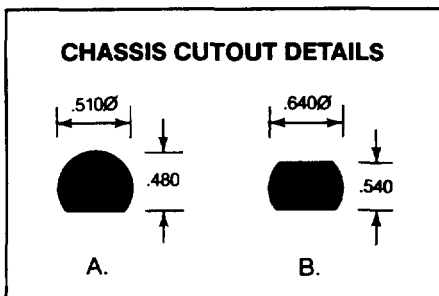


FIG. 4



CATALOG NUMBER	UG TYPE	FIG.	A	B	CHASSIS CUTOUT
630514		1	1.16	.52	B
630524		2	1.16	.61	A
630534	UG680	3	1.57	.58	B
630500	UG58	4	1.16	.66	C

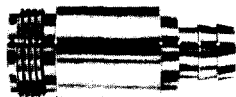
Cable Connectors

Compression Type



CATALOG NUMBER	CABLE TYPE
619520	RG 8/U, RG 213/U
619530	RG 9/U, RG 214/U

Crimp-on



CATALOG NUMBER	CABLE TYPE
619501	RG 8/U, RG 213/U
619511	RG 9/U, RG 214/U

FEATURES

- Intermateable with most N series connectors
- Silver-plated contacts result in excellent solderability and improved electrical characteristics
- Tarnish-resistant finish
- Low VSWR
- Competitively priced
- Off-the-shelf delivery
- Can be modified to any customer's requirements

ELECTRICAL CHARACTERISTICS*

- Impedance: 50 OHMS Nominal
- Frequency Range: 0 to 11 GHz
- Rated Working Voltage: 1500 RMS at Sea Level
- Dielectric Withstanding Voltage: 2500 RMS at Sea Level
- Insulation Resistance: 5000 Megohms

* Characteristics are typical and may not apply to all connectors. Contact the factory for exact specifications.

MATERIALS.

- Body: Brass CDA 360 with Bright Nickel Plating
- Insulator: Teflon
- Contacts: Phos-bronze with Silver Plating
- Crimp Ferrule: Copper or Brass with Bright Nickel Plating

Female/Female Adapters



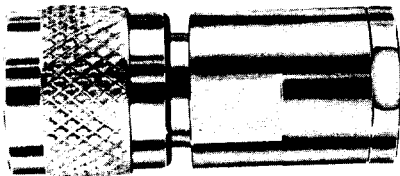
Cat. No. 666670 Female splice that interfaces with all Male N connectors



N male connectors



Male Compression Type

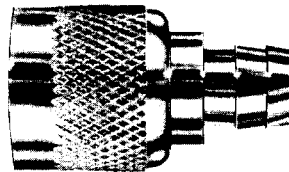


CATALOG NUMBER	UG TYPE	CABLE TYPE
609520	UG 21 B/U	RG 8/U RG 213/U
609530	UG 21 B/U	RG 9/U RG 214/U
609540	UG 21 E/U	RG 8/U RG 213/U
609550	UG 21 E/U	RG 9/U RG 214/U
609560		BELDEN 9880
609570		BELDEN 89880 TEFLON

MATERIALS

Body: Brass CDA 360 with Bright Nickel Plating
 Insulator: Teflon
 Contacts: Brass CDA 360 with Silver Plating
 Crimp Ferrule: Copper or Brass with Bright Nickel Plating

Male Crimp-on



CATALOG NUMBER	CABLE TYPE
609501	RG 8/U, RG 213/U
609511	RG 9/U, RG 214/U

ELECTRICAL CHARACTERISTICS*

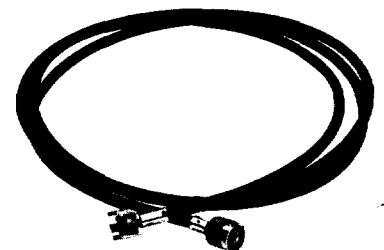
Impedance: 50 OHMS
 Nominal
 Frequency Range: 0 to 11 GH
 Rated Working Voltage: 1500 RMS at Sea Level
 Dielectric Withstanding Voltage: 2500 RMS at Sea Level
 Insulation Resistance: 5000 Megohms

* Characteristics are typical and may not apply to all connectors. Contact the factory for exact specifications.

FEATURES

- All N connectors are medium size and have a 1/8"-24 threaded-coupling interface for high reliability in critical applications
- Withstands shock and vibration to assure a low noise level
- Weatherproofing achieved by use of silicone rubber gaskets
- Tarnish-resistant finish
- Intermateable with most N series connectors
- Silver-plated contacts result in excellent solderability and improved electrical characteristics
- Cable affixment accomplished by either dual crimp or solder operations
- Low VSWR
- Cable Retention
 Dual Crimp Type: 60-80 lbs. min.
 Solder Type: 30-50 lbs.
- Competitively priced
- Hex crimp tools available
- Off-the-shelf delivery
- Can be modified to any customer's requirements

N Cable Assemblies

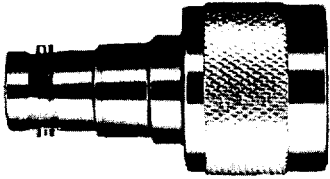


Unlimited range of custom cables can be provided to meet any customer's specifications.

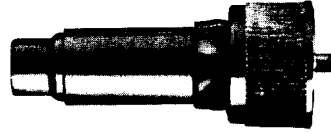


BETWEEN SERIES ADAPTERS

AVA ELECTRONICS CORP. • 4000 Bridge Street • DREXEL HILL, PA 19026 • 610/284-2500



AVA NO. 266570
BNC Jack to N Plug
(Ref. Type: UG 201)



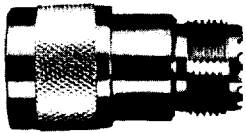
AVA NO. 355600
UHF Plug to Phono Jack



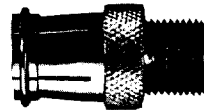
AVA NO. 266670
BNC Jack to N Jack



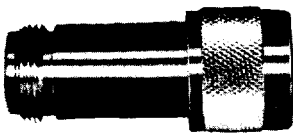
AVA NO. 155600
F Plug to Phono Jack



AVA NO. 653670
N Plug to UHF Jack
(Ref. Type: UG 146)



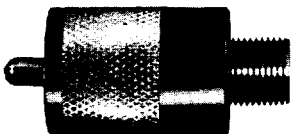
AVA NO. 151620
F Jack to F Push-on Plug



AVA NO. 663570
N Jack to UHF Plug
(Ref. Type: UG 83)



AVA NO. 165500
F Jack to Phono Plug



AVA NO. 351600
UHF Plug to F Jack

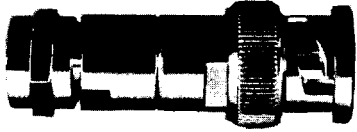


AVA NO. 165600
F Jack to Phono Jack

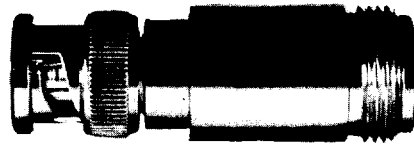


BETWEEN SERIES ADAPTERS

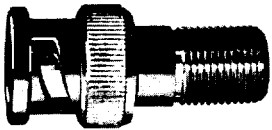
AVA ELECTRONICS CORP. • 4000 Bridge Street • DREXEL HILL, PA 19026 • 610/284-2500



AVA NO. 251500
BNC Plug to F Plug



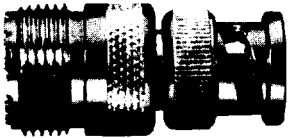
AVA NO. 256670
BNC Plug to N Jack
(Ref. Type: UG 349)



AVA NO. 251600
BNC Plug to F Jack



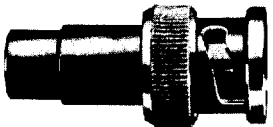
AVA NO. 261501
BNC Jack to F Plug



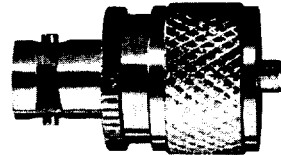
AVA NO. 253600
BNC Plug to UHF Jack
(Ref. Type: UG 255)



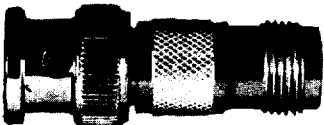
AVA NO. 261600
BNC Jack to F Jack



AVA NO. 255600
BNC Plug to Phono Jack



AVA NO. 263500
BNC Jack to UHF Plug
(Ref. Type: UG 273)



AVA NO. 256600
BNC Plug to TNC Jack

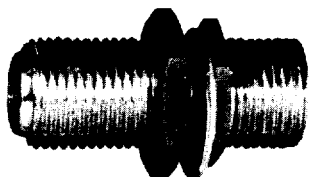


AVA NO. 261500
BNC Jack to Phono Plug



CHASSIS MOUNTED SPLICES

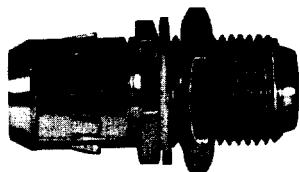
AVA ELECTRONICS CORP. • 4000 Bridge Street • DREXEL HILL, PA 19026 • 610/284-2500



AVA NO. 132003
F Jack to F Jack



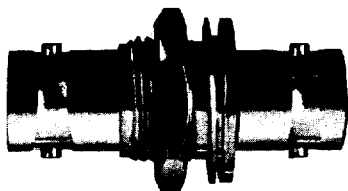
AVA NO. 363601
UHF Jack to UHF Jack
(Ref. UG224 — len. 1.38")



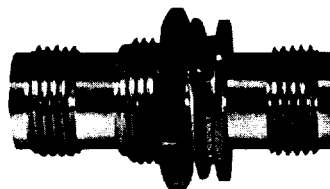
AVA NO. 132013
F Jack to F Push-On
Jack



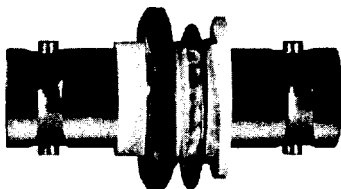
AVA NO. 363602
UHF Jack to UHF Jack
(Ref. UG363 — len. 2.00")



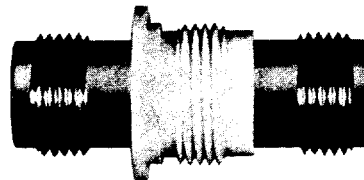
AVA NO. 262601
BNC Jack to BNC Jack
(Ref. Type: UG 492)



AVA NO. 666601
TNC Jack to TNC Jack



AVA NO. 232014
BNC Jack to BNC Jack
(Isolated)

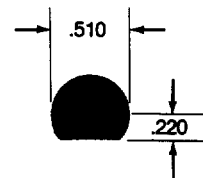


AVA NO. 632014
TNC Jack to TNC Jack
(Isolated)

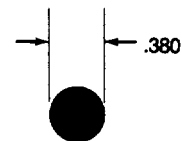
**ADAPTER
CHASSIS CUTOUTS**



UHF



BNC & TNC



F



CABLE SPLICES

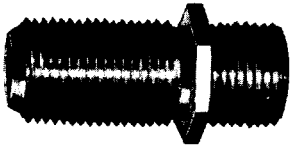
AVA ELECTRONICS CORP. • 4000 Bridge Street • DREXEL HILL, PA 19026 • 610/284-2500



AVA NO. 151500
F Plug to F Plug



AVA NO. 363600
UHF Jack to UHF Jack



AVA NO. 161600
F Jack to F Jack



AVA NO. 666600
TNC Jack to TNC Jack



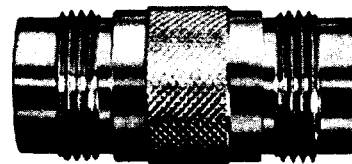
AVA NO. 252500
BNC Plug to BNC Plug



AVA NO. 666670
N Jack to N Jack



AVA NO. 262600
BNC Jack to BNC Jack
(Ref. Type: UG 914)



AVA NO. 464600
TWIN-AX Jack to TWIN-AX
Jack
(Ref. Type: IBM #7362230)



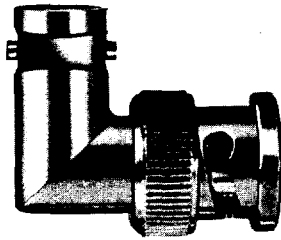
AVA NO. 353500
UHF Plug to UHF Plug

- All AVA Products can be modified to suit any customer's requirements, including many special configurations not shown.
- Standard plating is generally nickel with silver plated contacts; gold contacts (or tin) also available, along with silver plated body.
- Off-the-shelf delivery on most items.

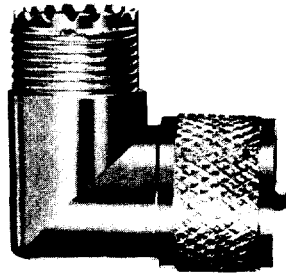


ANGLE AND TEE ADAPTERS

AVA ELECTRONICS CORP. • 4000 Bridge Street • DREXEL HILL, PA 19026 • 610/284-2500



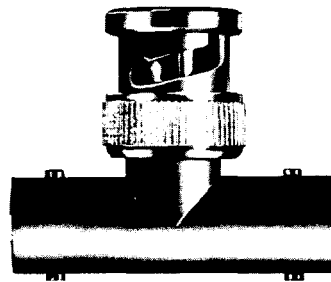
AVA NO. 252601
BNC Jack to BNC Plug
(Ref. Type: UG 306)



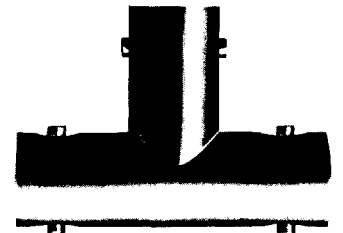
AVA NO. 353610
UHF Jack to UHF Plug
(Ref. Type: UG 646)

ANGLE ADAPTERS

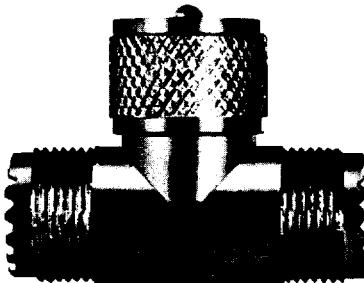
TEE ADAPTERS



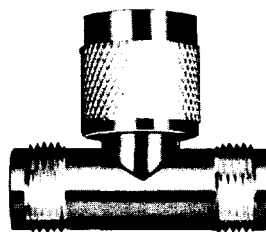
AVA NO. 252640
BNC Plug to TWO (2) BNC Jacks
(Ref. Type: UG 274)



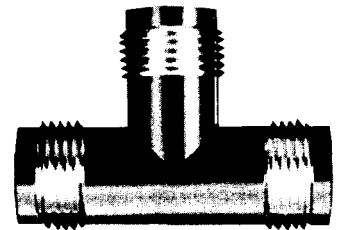
AVA NO. 262640
BNC Jack to TWO (2) BNC Jacks



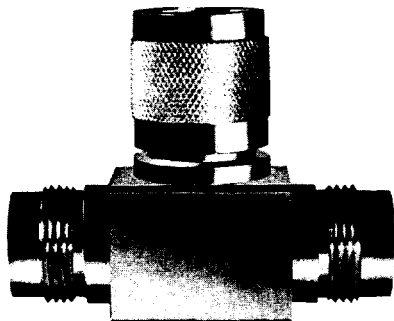
AVA NO. 353640
UHF Plug to TWO (2) UHF Jacks



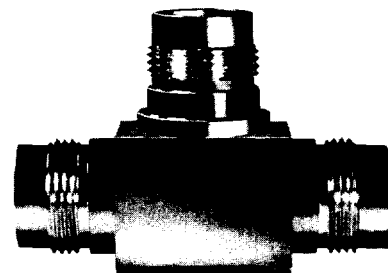
AVA NO. 656640
TNC Plug to TWO (2) TNC Jacks



AVA NO. 666640
TNC Jack to TWO (2) TNC Jacks



AVA NO. 464540
TWIN-AX Plug to TWO (2) TWIN-AX Jacks
(Ref. Type: IBM #4178269)
AVA NO. 464541 (Commercial Version)

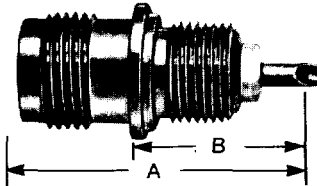


AVA NO. 464640
TWIN-AX Jack to TWO (2) TWIN-AX Jacks
(Ref. Type: IBM #6851167)
AVA NO. 464641 (Commercial Version)



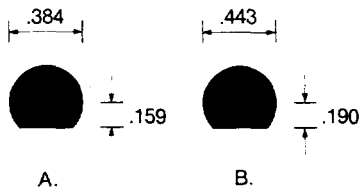
TNC connectors

Female Chassis



CATALOG NUMBER	A	B	CHASSIS CUTOUT
630014	1.12	.65	A
630024	1.12	.65	B

CHASSIS CUTOUT DETAILS

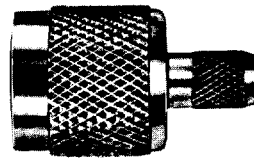


Female/Female Adapters



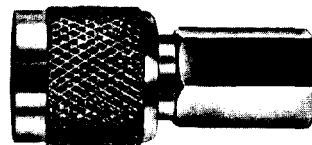
Cat. No. 666600
Female splice that interfaces with all male TNC connectors.

Male Crimp-on



CATALOG NUMBER	CABLE TYPE
603001	RG59/U, RG62/U
602011	RG58/U

Male Twist-on

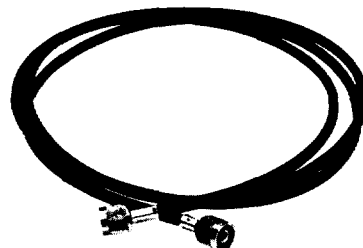


FEATURES

- Polypropylene insulator
- Phos-bronze center contact with silver-plating

CATALOG NUMBER	CABLE TYPE
603010	RG59/U, RG62/U

TNC Cable Assemblies



Unlimited range of custom cables can be provided to meet any customer's specifications.

FEATURES

- All TNC connectors have a 7/16-28 threaded coupling interface for critical applications and extreme environments
- High reliability for precision electronic applications
- Provides for greater stability at the higher microwave frequencies
- Improved RFI integrity
- Withstands shock and vibration
- Silver-plated contacts result in excellent solderability and improved electrical characteristics
- Competitively priced
- Can be modified to any customer's requirements
- Off-the-shelf delivery

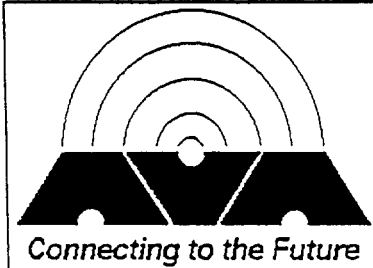
ELECTRICAL CHARACTERISTICS

Impedance: 50 OHMS
Nominal
Frequency Range: 0-11 GH
Voltage Rating: 500 Volts

MATERIALS

Body: Brass CDA 360 with Bright Nickel Plating
Insulator: Teflon
Contacts: Male: Brass CDA 360 with Silver Plating
Female: Beryllium Copper CDA 172 with Silver Plating
Crimp Ferrule: Brass CDA 360 with Bright Nickel Plating

CUSTOM DESIGN WORKSHEET



AVA ELECTRONICS CORPORATION

FAX: 610-259-8379

Please use this sheet to custom design your application

Connector Type & Gender: BNC, TNC, F, N, SMA, SMB, OTHER

Material for: Body: Contact: Insulator:

Plating for: Body: Contact:

Name: Company:

Phone: Fax:

