BNC Connectors

MAXCONN, INC. - 2151 DEL FRANCO STREETo SAN JOSE, CALIFORNIA 95131 - 408-435-5050,, FAX: 408-435-8377
MAXCONN EUROPE. - Edlingerstr. 3 - D-81543 Munich/München Tel: 49 (0) 89-65 11 30 88, Fax: 49 (0) 89-65 11 30 88
E-Mail: office@eucon-elektronik.com - Web: http://www.eucon-elektronik.com

MBNC Series

Right Angle, Vertical, Surface Mount Receptical with Terminating Resistors and Filtering Capacitors

Features

- UL and CSA approved E107337 and E145613
- 50 and 75 ohm impedance
- 9400pF filtered option
- Terminating resistors

How to Order

MBNC – – – –

Series
MBNC – Single
MSBNC – Stacked

Filtered
Blank – Non-Filtered
F – Filtered

R – Right Angle
V – Vertical

Insulator
B – Black
W – White
M – All metal

PCB Mounting
Blank – Through hole
S – SMT

Plating
1 – Tin plated
2 – Gold plated (Standard)

Options
Blank – 50 ohms
75 – 75 ohms

Performance Specifications

Materials and Finish

Metal Housing: 100 microinch minimum nickel plating over zinc alloy
Contact: Contact area 1-—200 microinch tin/lead plating over 50 microinch nickel plating overall
Plastic Insulator: PBT UL94V-0 rated black or white
Contact Insulator: Polypropylene
Mounting Post: Tin plating over brass
Grounding Terminal: Tin plating over copper wire

Electrical Characteristics

Impedance: 75 ohm
Frequency Range: 50 ohms 0–1 GHz
75 ohms 0–4 GHz
Operating Voltage: 500 Volts RMS
Contact Resistance: 3.0 mohms maximum (gold)
Dielectric Withstanding Voltage: 1500 Volts RMS
Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Durability: 500 cycles/mated/unmated
Ceramic Capacitor: 4700PF @ 10% x 2 (9400PF)
Resistive Value: 1/2 Watt 5% 50, 75, and 93 ohms
Operating Temperature: -40° C to + 85° C

Environmental Characteristics

Temperature Range: -50°C to +85°C
Thermal Shock-Mill-Std: 1344, Method 1033, Condition A
Salt Spray-Mill-Std: 1344, Methond 1001, Condition B
Physical Shock-Mill-Std: 1344, Method 2004, Condition G
Humidity-Mill-Std: 1344, Method 1002, Procedure B Type 2

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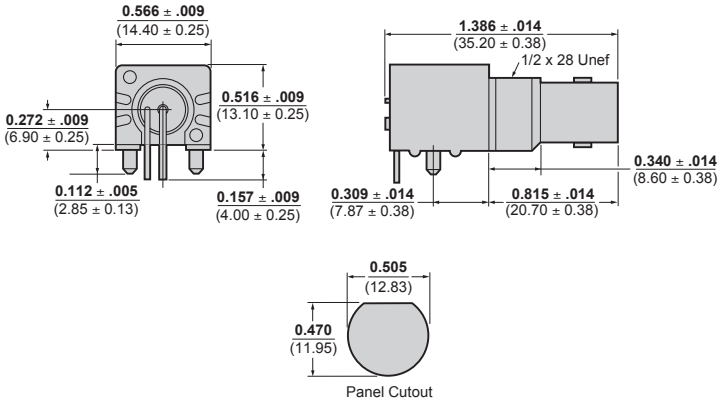
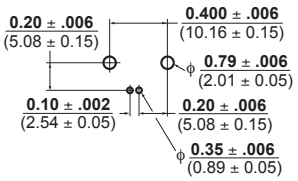
MBNC-RW-1

50 ohm, Right Angle, Low Profile
.516 Height, Thru Hole (White body) (Black optional)

DIMENSIONS



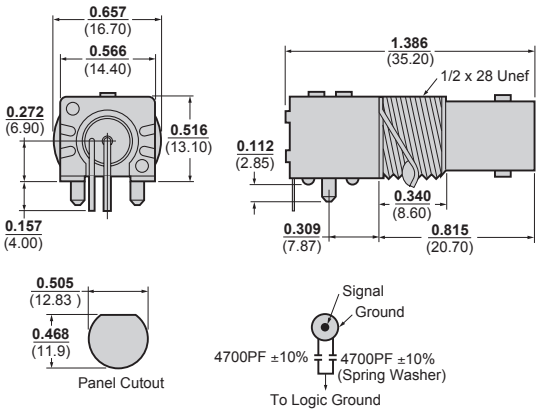
PCB LAYOUT



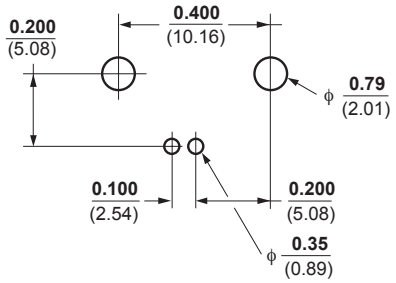
MBNCF-RB-2

50 ohm, Right Angle, Filtered
9400pf, .516 Height, Thru Hole (Black body standard)

DIMENSIONS



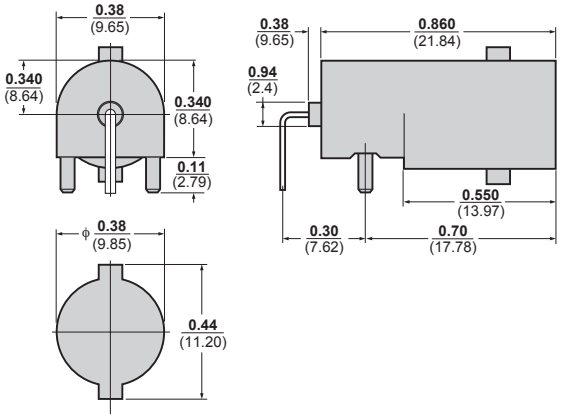
PCB LAYOUT



MBNC-R-1

50 ohm, Right Angle, Low Profile
.340 Height, Non-Insulated, Thru Hole

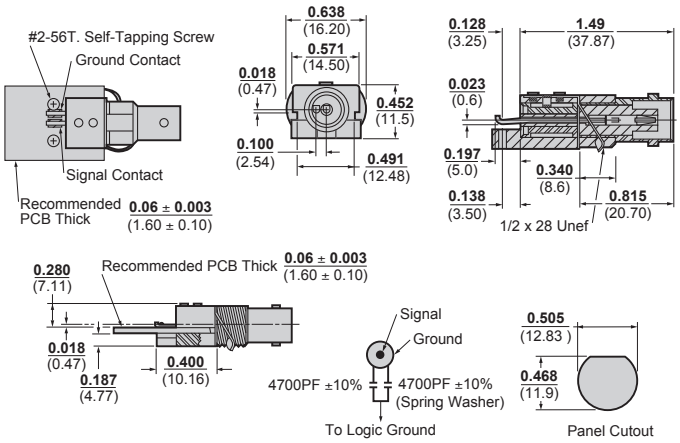
DIMENSIONS



MBNCF-RBS-1

50 ohm, Filtered 9400pf
.515 Height, Surface Mount (Black body)

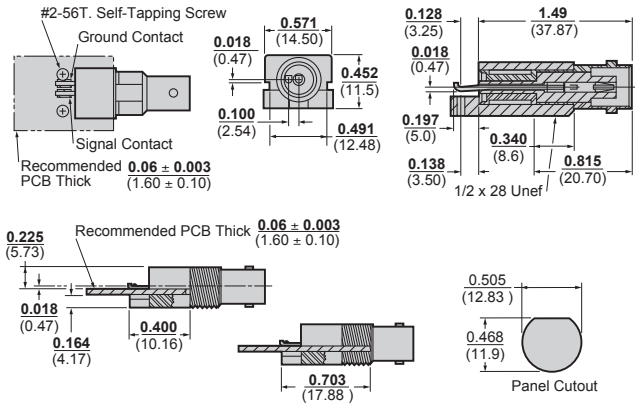
DIMENSIONS



MBNC-RBS-1

50 ohm, Right Angle
.515 Height, Surface Mount (Black body)

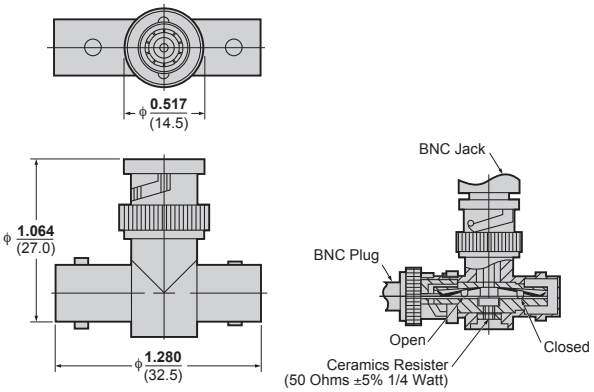
DIMENSIONS



MBNC-T1 Series

50, 75, 93 ohm Adapter 'T', F-M-F

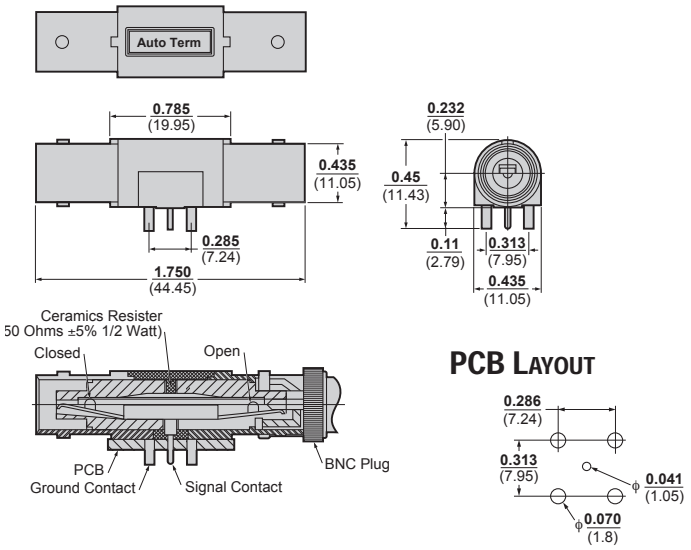
DIMENSIONS



MBNC-TFF-1

50 ohm PCB 'T', F-F Adapter Terminator

DIMENSIONS



PCB LAYOUT

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MBNC Series
Right Angle, Vertical, Terminators, and Filtered Board Level Connectors

Features
- UL and CSA approved E107337 and E145613
- 50 and 75 ohm impedance
- 9400pF filtered option
- Terminating resistors

Performance Specifications
Materials and Finish
Housing/Shield: Nickel plated brass 100 microinch**Insulator**

Outer Body: Glass filled polyester UL90V-0

Inner Insulator: Polypropylene

Contact

Female Contact: Phosphor bronze, gold plated

Grounding Terminal: Nickel plated brass

Electrical Characteristics
Normal Impedance: 50 ohm

Insulation Resistance: 5000 Megohms minimum

Dielectric Withstanding Voltage: 1500 Vrms

Operating Voltage: 500 minimum

Contact resistance: 3.0 mohms maximum

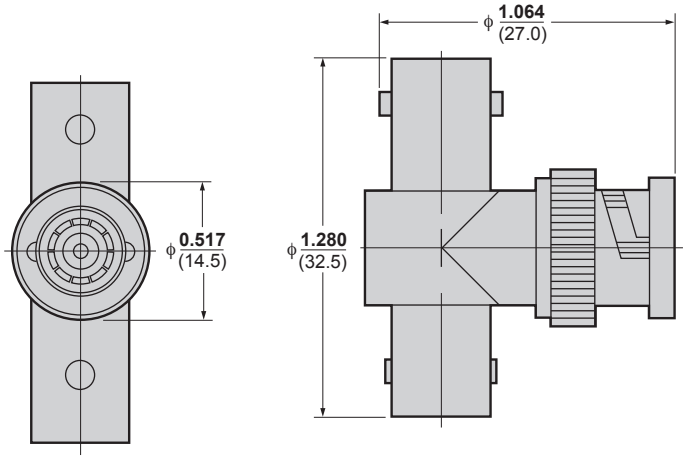
Mechanical Characteristics
Durability: 500 mating cycles

Ceramic Capacitor: 4700PF @ 10% x 2 (9400PF)

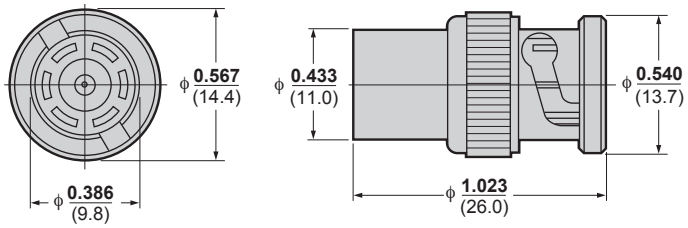
Resistor Value: 1.2 Watt 5% 50, 75, 0r 93 ohms

Operating Temperature: -40° C to + 125° C

MBNC-T-2
50 ohm 'T', F-M-F Adapter
Dimensions



MBNC-2TT1 – 50 ohm
1/2 Watt 5% 75 ohm
93 ohm
Dimensions



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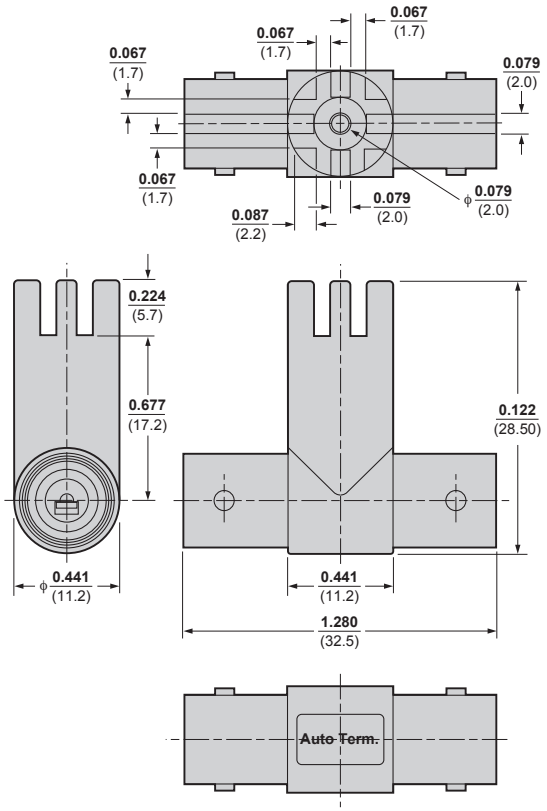
MBNC-AT Series

Auto-Termination SMT Compatible PCB Mount Double Female Connector

DIMENSIONS



Performance Specifications

Materials and Finish

Body: 100µ inch minimum nickel plating over zinc alloy

Female Insulator: Polypropylene UL 94HB

Retaintion Insulator: Teflon

Male Contact: Gold plating over brass

Female Contact: Gold plating over high strength copper

Retaintion Washer: Gold plating over copper wire

Thick Film Chip Resistors: 50 ohms ±1/4 Watt (max. over load voltage –400Vdc)

Retaintion Washer: Nickel plating over copper strip

Retaintion Cover: Nickel plating over Zinc alloy

Electrical Characteristics

Normal Impedance: 50 ohms

Frequency Range: 0~1GHz

Operating Voltage: 500 Vrms

Contact Resistance: 3.0 milliohms maximum

Dielectric Withstanding Voltage: 500 Vrms

Insulation Resistance: 5000 Megohms minimum

Ceramic Resistor: Thick film chip resistors: 50 ohms ±5%, 1.4 Watt

Voltage Rating

$E=\sqrt{PR}$

E=Voltage Rating (V)

P=Power Rating at 70°C (W)

R=Standard Resitance Values (Ω)

Mechanical Characteristics

Mating/Unmating: 500 cycles

Envionmental Characteristics

Temperature Rating: -55° C to + 85° C

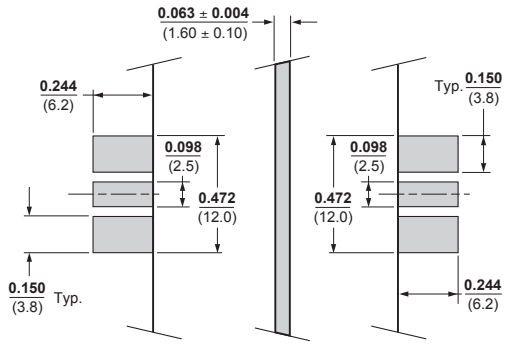
Thermal Shock: MIL-STD-1344, Method 1003, Cond. A

Salt Spray: MIL-STD-1344, Method 1001, Cond. B

Physical Shock: MIL-STD-1344, Method 2004, Cond. G

Hunidity: MIL-STD-1344, Method 1002, Cond. B (type 2)

PCB LAYOUT



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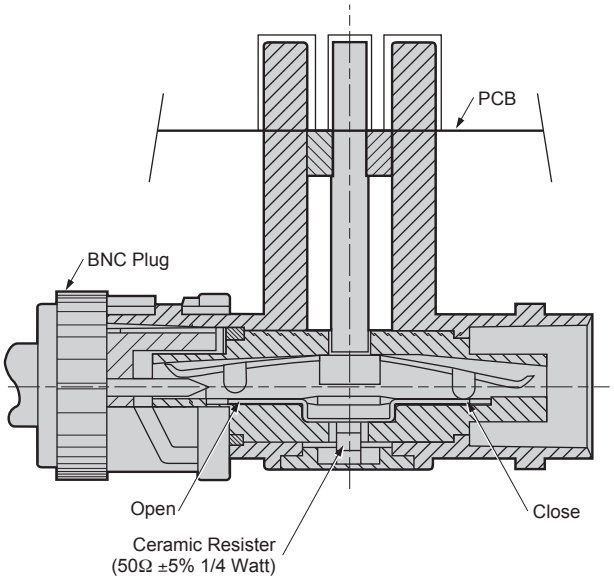
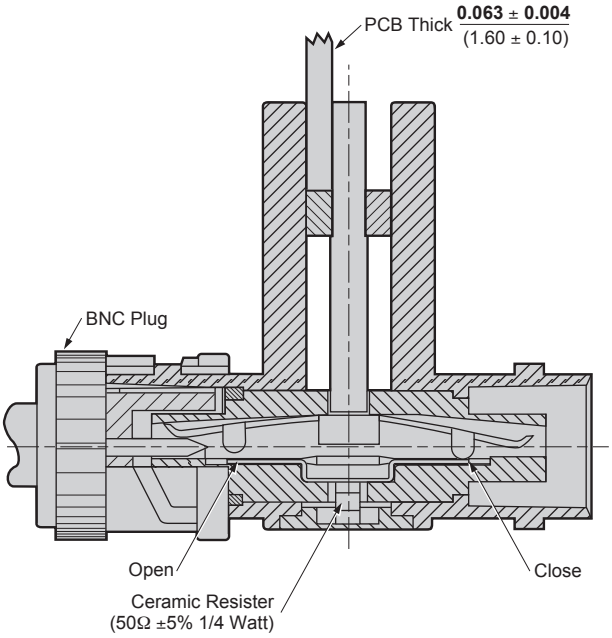
MBNC-AT Series

Auto-Termination, SMT-Compatible
PCB Mount Double Female Connector

USED HORIZONTAL



USED VERTICAL



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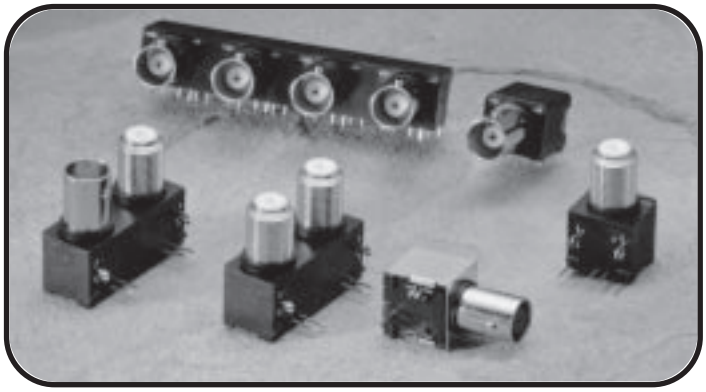
MBNC Series

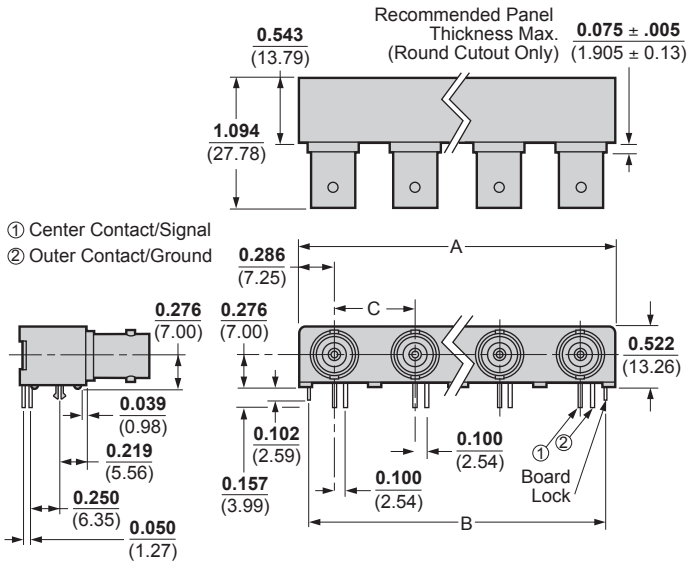
BNC Connector Right Angle PCB Mount Receptical



Features

- UL and CSA approved E107337 and E145613
- Low profile
- Space saving
- High frequency

Dimensions



Performance Specifications

Materials and Finish

Contact: Contact area 100–200 microinch tin/lead plating over 50 microinch nickle plating overall

Ground Terminal: Tin plating over copper wire

Threaded Body: 100 microinch minimum nickel plating over zinc alloy

Insulator: Polypropylene UL 94HB

Housing: PBT (UL 94V-O)

Mounting Post: Tin plating over brass

Electrical Characteristics

Normal Impedance: Non-constant

Frequency Range: 0~2GHz

Operating Voltage: 250 Vrms

Contact Resistance: 3.0 milliohms maximum (gold)

Dielectric Withstanding Voltage: 1500 Vrms

Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Durability: 500 cycles/mated/unmated

Contact Separation Force: 1.0 kg minimum (total connector)

Contact Enganement Force: 1.27 kg maximum (total connector)

Envionmental Characteristics

Temperature Rating: -55° C to + 85° C

Thermal Shock: MIL-STD-1344, Method 1003, Cond. A

Salt Spray: MIL-STD-1344, Method 1001, Cond. B

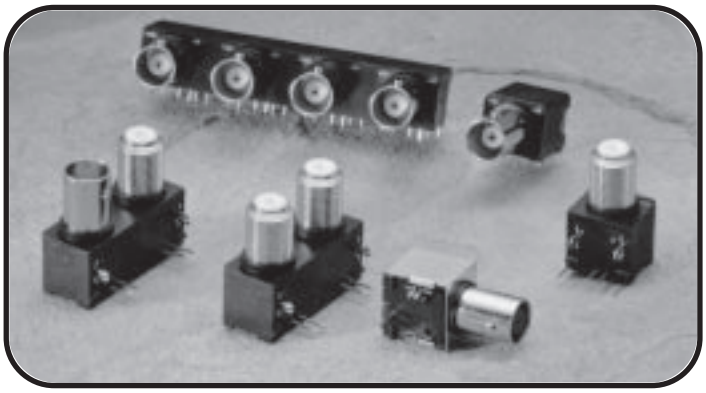
Physical Shock: MIL-STD-1344, Method 2004, Cond. G

Hunidity: MIL-STD-1344, Method 1002, Cond. B (type 2)

Ports	A	B	C
1	**0.571** 14.50	**0.400** 10.16	**—** —
2	**1.272** 32.31	**1.10** 27.97	**0.701** 17.81
4	**2.67** 68.89	**2.50** 63.53	**0.701** 17.81

MBNC Series

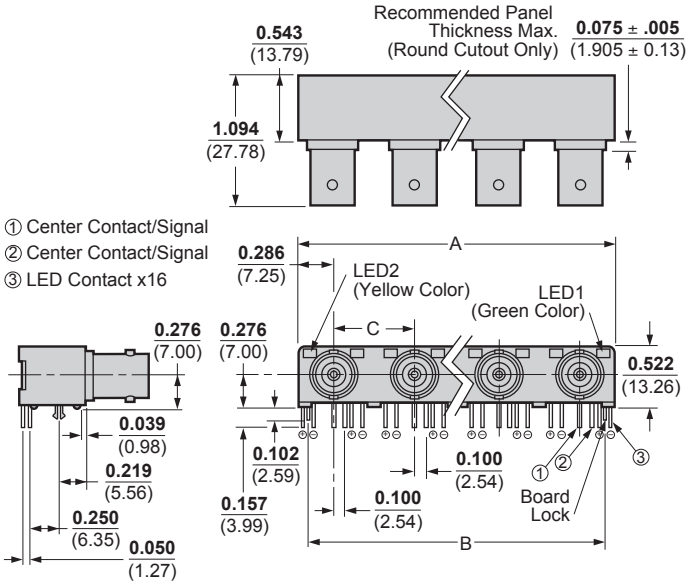
BNC Connector Right Angle PCB Mount Receptical With LED Indicator



Features

- UL and CSA approved E107337 and E145613
- Low profile
- Space saving
- High frequency
- Optional LED

Dimensions



Performance Specifications

Materials and Finish

Contact: Contact area 100–200 microinch tin/lead plating over 50 microinch nickle plating overall

Ground Terminal: Tin plating over copper wire

Threaded Body: 100 microinch minimum nickel plating over zinc alloy

Insulator: Polypropylene UL 94HB

Housing: PBT (UL 94V-O)

Mounting Post: Tin plating over brass

Electrical Characteristics

Normal Impedance: Non-constant

Frequency Range: 0~2GHz

Operating Voltage: 250 Vrms

Contact Resistance: 3.0 milliohms maximum (gold)

Dielectric Withstanding Voltage: 1500 Vrms

Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Durability: 500 cycles/mated/unmated

Contact Separation Force: 1.0 kg minimum (total connector)

Contact Enganement Force: 1.27 kg maximum (total connector)

Envionmental Characteristics

Temperature Rating: -55° C to + 85° C

Thermal Shock: MIL-STD-1344, Method 1003, Cond. A

Salt Spray: MIL-STD-1344, Method 1001, Cond. B

Physical Shock: MIL-STD-1344, Method 2004, Cond. G

Hunidity: MIL-STD-1344, Method 1002, Cond. B (type 2)

Optional LED Characteristics

LED: Yellow LED: GaASP/GaP

Green LED: GaP

Luninous Intensity(mcd):

The maximum for 10mA is 1.25 Vs

The minimum for 10mA is 0.5 Vs

Wavelength (nm):

LED1 green: 565 nm

LED2 yellow: 590 nm

Viewing Angle: 2θ1/2: 110°

Ports	A	B	C
1	**0.571** 14.50	**0.400** 10.16	— —
2	**1.272** 32.31	**1.10** 27.97	**0.701** 17.81
4	**2.67** 68.89	**2.50** 63.53	**0.701** 17.81

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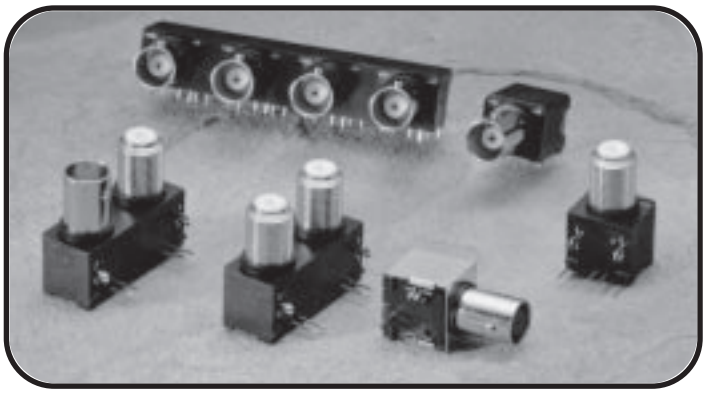
MNF Series
Right Angle, F-Connector PCB Mount Receptical



Features

- UL and CSA approved E107337 and E145613
- 50 and 75 ohm impedance
- 9400pF filtered option
- Terminating resistors

How to Order

MNF – – –

Series
MBNC – BNC
MNF – F-type

Shielding
Blank – Withour shield
S – Shielded

Ganged
S – Single
G – Ganged

Mounting
R – Right angle
V – Vertical

Number of Ports
1, 2, 4

Options
Blank – Without LED
L1 – LED green/yellow (Standard)
L2 – LED yellow/green
Blank – Without combination
C – Combination (F and BNC, RJ-11, RJ45)

Contact Plating
1 – Tin plated over nickel
2 – Gold plated over nickel (Standard)

Performance Specifications

Materials and Finish

Contact: Contact area 100–200 microinch tin/lead plating over 50 microinch nickle plating overall

Ground Terminal: Tin plating over copper wire

Threaded Body: 100 microinch minimum nickel plating over zinc alloy

Insulator: Polypropylene UL 94HB

Housing: PBT (UL 94V-O)

Mounting Post: Tin plating over brass

Electrical Characteristics

Normal Impedance: Non-constant

Frequency Range: 0~2GHz

Operating Voltage: 250 Vrms

Contact Resistance: 3.0 milliohms maximum (gold)

Dielectric Withstanding Voltage: 1500 Vrms

Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Durability: 500 cycles/mated/unmated

Contact Separation Force: 1.0 kg minimum (total connector)

Contact Enganement Force: 1.27 kg maximum (total connector)

Envionmental Characteristics

Temperature Rating: -55° C to + 85° C

Thermal Shock: MIL-STD-1344, Method 1003, Cond. A

Salt Spray: MIL-STD-1344, Method 1001, Cond. B

Physical Shock: MIL-STD-1344, Method 2004, Cond. G

Hunidity: MIL-STD-1344, Method 1002, Cond. B (type 2)

Optional LED Characteristics

LED: Yellow LED: GaASP/GaP
Green LED: GaP

Luninous Intensity(mcd):
The maximum for 10mA is 1.25 Vs
The minimum for 10mA is 0.5 Vs

Wavelength (nm):
LED1 green: 565 nm
LED2 yellow: 590 nm

Viewing Angle: 2θ1/2: 110°

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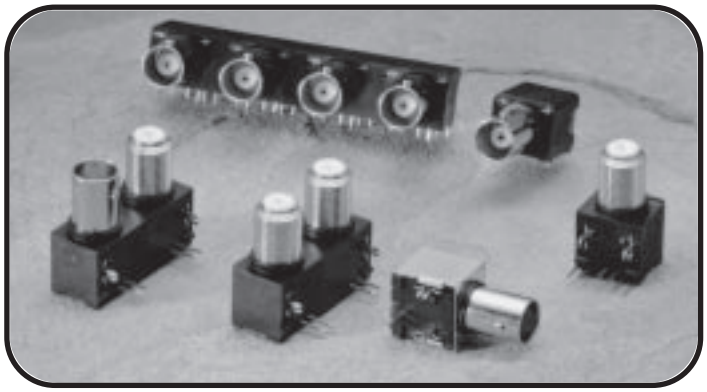
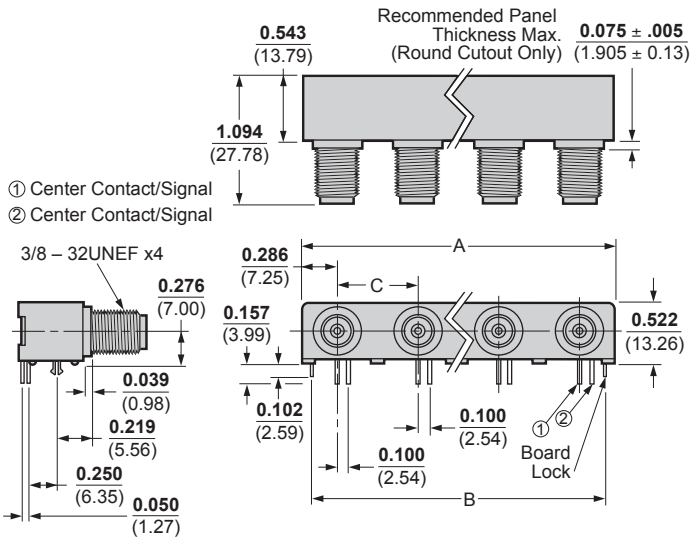
MNF Series
F-Connector, Right Angle, PCB Mount Receptical



Features

- UL and CSA approved E107337 and E145613
- Low profile
- Space saving
- High frequency
- Optional LED

Dimensions



Performance Specifications

Materials and Finish

Contact: Contact area 100–200 microinch tin/lead plating over 50 microinch nickle plating overall

Ground Terminal: Tin plating over copper wire

Threaded Body: 100 microinch minimum nickel plating over zinc alloy

Insulator: Polypropylene UL 94HB

Housing: PBT (UL 94V-O)

Mounting Post: Tin plating over brass

Electrical Characteristics

Normal Impedance: Non-constant

Frequency Range: 0~2GHz

Operating Voltage: 250 Vrms

Contact Resistance: 3.0 milliohms maximum (gold)

Dielectric Withstanding Voltage: 1500 Vrms

Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Durability: 500 cycles/mated/unmated

Contact Separation Force: 1.0 kg minimum (total connector)

Contact Enganement Force: 1.27 kg maximum (total connector)

Envionmental Characteristics

Temperature Rating: -55° C to + 85° C

Thermal Shock: MIL-STD-1344, Method 1003, Cond. A

Salt Spray: MIL-STD-1344, Method 1001, Cond. B

Physical Shock: MIL-STD-1344, Method 2004, Cond. G

Hunidity: MIL-STD-1344, Method 1002, Cond. B (type 2)

Optional LED Characteristics

LED: Yellow LED: GaASP/GaP
Green LED: GaP

Luninous Intensity(mcd):
The maximum for 10mA is 1.25 Vs
The minimum for 10mA is 0.5 Vs

Wavelength (nm):
LED1 green: 565 nm
LED2 yellow: 590 nm

Viewing Angle: 2θ1/2: 110°

Ports	A	B	C
1	**0.571** 14.50	**0.400** 10.16	**—** —
2	**1.272** 32.31	**1.10** 27.97	**0.701** 17.81
4	**2.67** 68.89	**2.50** 63.53	**0.701** 17.81

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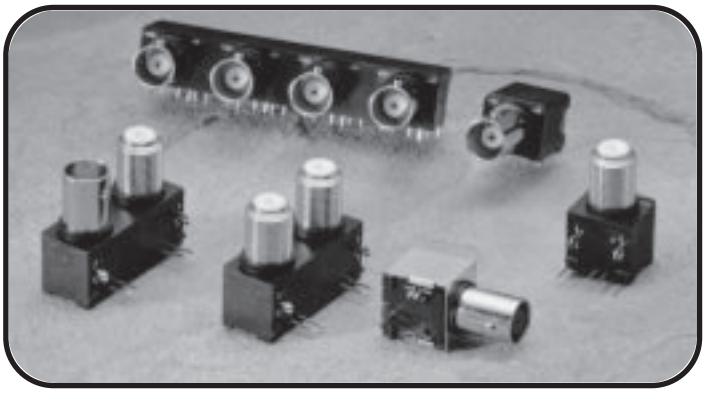
MNF Series

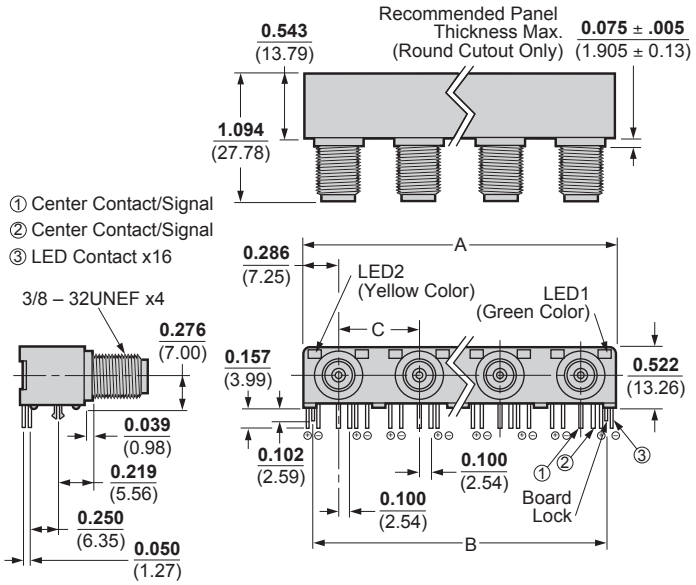
F-Connector, Right Angle, PCB Mount Receptical with LED



Features

- UL and CSA approved E107337 and E145613
- Low profile
- Space saving
- High frequency
- Optional LED

Dimensions



Performance Specifications

Materials and Finish

Contact: Contact area 100–200 microinch tin/lead plating over 50 microinch nickle plating overall

Ground Terminal: Tin plating over copper wire

Threaded Body: 100 microinch minimum nickel plating over zinc alloy

Insulator: Polypropylene UL 94HB

Housing: PBT (UL 94V-O)

Mounting Post: Tin plating over brass

Electrical Characteristics

Normal Impedance: Non-constant

Frequency Range: 0~2GHz

Operating Voltage: 250 Vrms

Contact Resistance: 3.0 milliohms maximum (gold)

Dielectric Withstanding Voltage: 1500 Vrms

Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Durability: 500 cycles/mated/unmated

Contact Separation Force: 1.0 kg minimum (total connector)

Contact Enganement Force: 1.27 kg maximum (total connector)

Envionmental Characteristics

Temperature Rating: -55° C to + 85° C

Thermal Shock: MIL-STD-1344, Method 1003, Cond. A

Salt Spray: MIL-STD-1344, Method 1001, Cond. B

Physical Shock: MIL-STD-1344, Method 2004, Cond. G

Hunidity: MIL-STD-1344, Method 1002, Cond. B (type 2)

Optional LED Characteristics

LED: Yellow LED: GaASP/GaP
Green LED: GaP

Luninous Intensity(mcd):
The maximum for 10mA is 1.25 Vs
The minimum for 10mA is 0.5 Vs

Wavelength (nm):
LED1 green: 565 nm
LED2 yellow: 590 nm

Viewing Angle: 2θ1/2: 110°

Ports	A	B	C
1	**0.571** 14.50	**0.400** 10.16	**—** —
2	**1.272** 32.31	**1.10** 27.97	**0.701** 17.81
4	**2.67** 68.89	**2.50** 63.53	**0.701** 17.81

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