

RF178-02RP1-01BJ1-0200

RF178-02SP1-02RP1-0300

50 Ω RG 178 CABLE ASSEMBLIES

SPECIFICATIONS

For complete specifications
see www.samtec.com?RF178

RF Connector:

Outer Contact Material:
Au plated Brass (SMA & SMB)
Au plated BeCu (MCX & MMCX)
Nickel (BNC & TNC)

Center Contact Material:

Au plated Brass
(MCX-P, MMCX-P, BNC,
TNC & SMB)

Au plated BeCu
(SMA-J & MCX-J)

Insulator Material:

PTFE

Operating Temperature:

-50 °C to +165 °C

Frequency Range:

0-5 GHz
(Connector dependent)

Impedance:

50 Ω

RoHS Compliant:

Yes

RG 178 Cable:

Impedance:

50 Ω

Capacitance:

96 pF/meter

Propagation Delay:

4.83 nsec/meter

Max Attenuation

(cable only):

1.7 dB @ 1 GHz for 1 meter

Conductor Size:

30 AWG, (0.31 mm) .012" dia.

Conductor Material:

Silver Plated Copper

Conductor Resistance:

0.34 Ω/meter max

Current Rating:

3 A DC

Insulator Diameter:

(0.86 mm) .034"

Insulator Material:

PTFE

Dielectric Constant:

2.1 dK

Shield Material:

Silver Plated Copper Clad Steel

Jacket Material:

FEP

Jacket Diameter:

(1.80 mm) .071"

Jacket Temp Rating:

-50 °C to +165 °C

Jacket Color:

Amber

Bend Radius:

10.2 mm

RoHS Compliant:

Yes

Mates with:

MCX, MMCX, BNC5,
TNC, SMA, SMB5



Solutionator
DESIGN IN A MINUTE

- Create a full system:
cable assembly and board level mates,
50 Ω and 75 Ω solutions
- Free samples available
- Visit: rf.samtec.com

Light Gauge 30 AWG
RG 178 coax cable

2.1dK

Standard Heat
Shrink

SMA, MCX, MMCX,
SMB, BNC, TNC and
N Type End Options

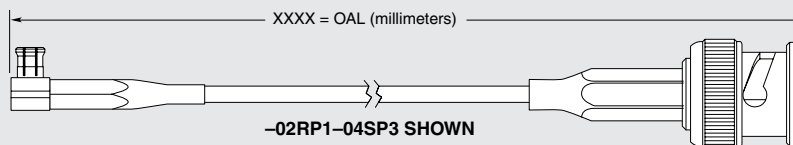
CABLE TYPE

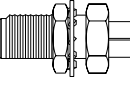
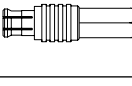
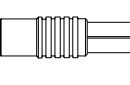
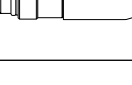
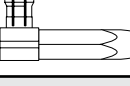
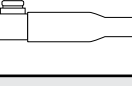
END 1
CONNECTOR

END 2
CONNECTOR

RF178
= RG 178 Cable

Specify END OPTIONS from chart



END OPTIONS		END OPTIONS	
-01BJ1 = SMA Straight Bulkhead Jack -01BR1 = SMA Straight Bulkhead Jack, Reversed Polarity (30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-02SP1 = MCX Straight Plug (30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-02SJ1 = MCX Straight Jack (30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-03SP1 = MMCX Straight Plug (30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-02RP1 = MCX Right-angle Plug (30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-03RP1 = MMCX Right-angle Plug (30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	

Due to technical progress, all designs, specifications and components are subject to change without notice.

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All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.



RF178-04SP3-02SJ1-0100

RF178-01BJ1-03RP1-0200



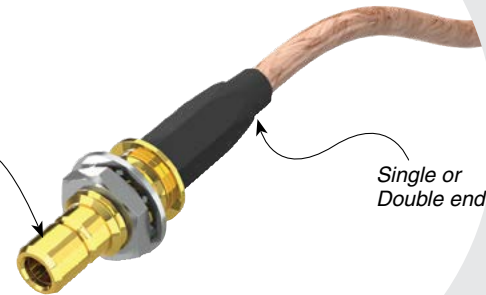
RF178-07BJ2-03SP1-0200

RF178 SERIES

Straight or
Right-angle



Variety of
Bulkhead Jacks



Single or
Double ended

ALSO AVAILABLE (MOQ Required)

- Additional stripping and tinning options
- IP67 TNC option
- Additional plating options
- Additional end connector combinations

OTHER SOLUTIONS

- Cable connector kits
(see cable components catalog pages)

OVERALL LENGTH

—“XXXX”

= Overall Length in millimeters –0100 (100 mm) 3.94" minimum

END OPTIONS		END OPTIONS	
-04SP3 = BNC Straight Plug (10 μ" (0.25 μm)) Gold on Center Contact, Nickel on Shell)		-05BJ3 = TNC Straight Bulkhead Jack (10 μ" (0.25 μm)) Gold on Center Contact, Nickel on Shell)	
-05SP3 = TNC Straight Plug (10 μ" (0.25 μm)) Gold on Center Contact, Nickel on Shell)		-06BJ2 = N Type Straight Bulkhead Jack (30 μ" (0.76 μm)) Gold on Center Contact, Nickel on Shell)	
-04BJ2 = BNC Straight Bulkhead Jack (30 μ" (0.76 μm)) Gold on Center Contact, Nickel on Shell)		-SING = Single Ended (End 2 Callout)	
-07BJ2 = SMB Straight Bulkhead Jack (30 μ" (0.76 μm)) Gold on Center Contact, Nickel on Shell)		XXXXXX = Stripped & Tinned (End 2 Callout)	

STRIPPED & TINNED (Dimensions in mm)

CALLOUT	A	B	C
-303030	3.0	3.0	3.0
-303040	3.0	3.0	4.0
-403030	4.0	3.0	3.0
-403040	4.0	3.0	4.0
-404040	4.0	4.0	4.0

Both center conductor and braid shield are stripped, only the center conductor is tinned.

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