

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

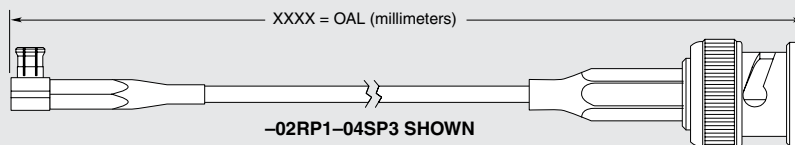
CABLE TYPE

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 μ m) Gold on Center Contact, Gold Flash on Shell)		-02SP1 = MCX Straight Plug (30 μ " (0.76 μ m) Gold on Center Contact, Gold Flash on Shell)	
-02SJ1 = MCX Straight Jack (30 μ " (0.76 μ m) Gold on Center Contact, Gold Flash on Shell)		-03SP1 = MMCX Straight Plug (30 μ " (0.76 μ m) Gold on Center Contact, Gold Flash on Shell)	
-02RP1 = MCX Right-angle Plug (30 μ " (0.76 μ m) Gold on Center Contact, Gold Flash on Shell)		-03RP1 = MMCX Right-angle Plug (30 μ " (0.76 μ m) Gold on Center Contact, Gold Flash on Shell)	

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

WWW.SAMTEC.COM

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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