

RF174-07SP1-01BJ1-0300

RF174-01RP1-02RP1-0200

# 50Ω RG 174 CABLE ASSEMBLIES

## SPECIFICATIONS

For complete specifications see [www.samtec.com?RF174](http://www.samtec.com?RF174)

### RF Connector:

#### Outer Contact Material:

Ni plated Brass (BNC)  
Au plated Brass (SMB & SMA)  
Au plated BeCu (MCX & MMCX)

#### Center Contact Material:

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

Au plated BeCu (SMB-P & SMA-J)

Au plated Phos. Bronze (BNC-J)

#### Insulator Material:

PTFE

#### Operating Temperature:

-50°C to +90°C

#### Insulator Resistance:

5,000 MΩ

#### Impedance:

50Ω

#### Frequency Range:

0-6 GHz

(Cable & connector dependent)

#### RoHS Compliant:

Yes

### RG 174 Cable:

#### Impedance:

50Ω

#### Capacitance:

101.024 pF/meter

#### Max Attenuation

(cable only):

1.4dB @ 1 GHz for 1 meter

#### Conductor Size:

26 AWG, (0.48 mm) .019" dia.

#### Conductor Material:

Copper

#### Insulator Material:

LEP

#### Shield Material:

Tin Copper

#### Jacket Material:

PVC

#### Jacket Diameter:

(2.70 mm) .106"

#### Jacket Color:

Black

#### Bend Radius:

25.4 mm

#### RoHS Compliant:

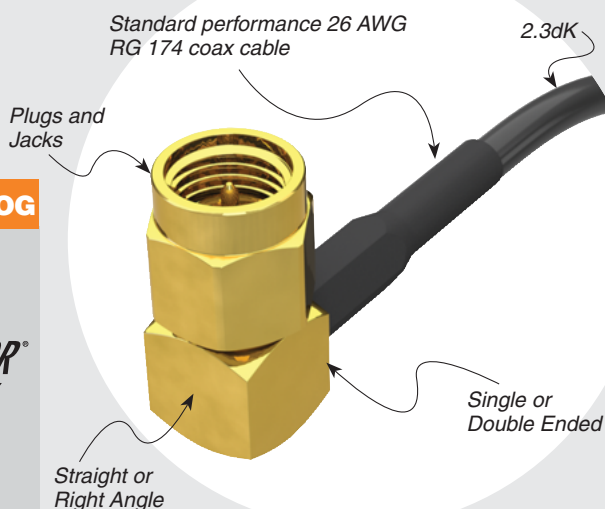
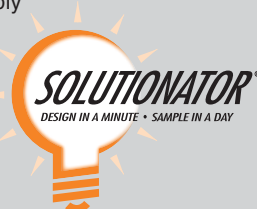
Yes

### Mates with:

MCX, MMCX, MMCXV,  
SMA, SMB5, BNC5,  
TNC, NTPE

## THINK OUTSIDE THE CATALOG

- Create a full system: cable assembly and board level mates, 50Ω and 75Ω solutions
- 24-hour samples on standard products
- Visit: [rf.samtec.com](http://rf.samtec.com)



### CABLE TYPE

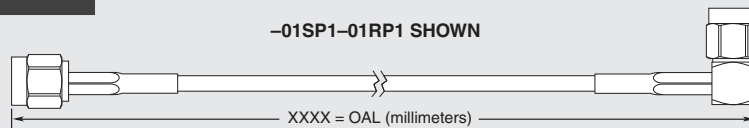
### END 1 CONNECTOR

### END 2 CONNECTOR

**RF174**  
= RG 174 Cable

Specify END OPTIONS from chart

-01SP1-01RP1 SHOWN



END OPTIONS		END OPTIONS	
-01SP1 = SMA Straight Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-02RP1 = MCX Right Angle Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-01RP1 = SMA Right Angle Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-02SP1 = MCX Straight Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-07SP1 = SMB Straight Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-03SP1 = MMCX Straight Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-07RP1 = SMB Right Angle Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-03RP1 = MMCX Right Angle Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-02SJ1 = MCX Straight Jack (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)		-V3SP1 = MMCXV Straight Plug, High Vibration (30μ" (0.76 μm) Gold on Center Contact, Nickel on Shell)	
		-V3RP1 = MMCXV Right Angle Plug, High Vibration (30μ" (0.76 μm) Gold on Center Contact, Nickel on Shell)	
		-V3SJ1 = MMCXV Straight Jack, High Vibration (30μ" (0.76 μm) Gold on Center Contact, Nickel on Shell)	

RF174-03RP1-07RP1-0200

RF174-02RP1-02SP1-0200

RF174-04BJ2-07SP1-0100

## RF174 SERIES

Heavy Gold plated

Standard heat shrink wraps

Choice of RF connector styles

### ALSO AVAILABLE (MOQ Required)

- Additional stripping and tinning options
  - IP67 TNC option
  - Additional plating options
  - Additional end connector combinations
  - Knurled nuts with BNC option
- Contact Samtec.

Variety of Bulkhead Jacks

Single or Double ended

### OTHER SOLUTIONS

- Cable connector kits (see cable components catalog pages)

## OVERALL LENGTH

—“XXXX”

= Overall Length in millimeters -0100 (100 mm) minimum  
(Cable lengths larger than 1000 millimeters are not supported by S.I. Test data)

END OPTIONS		END OPTIONS		END OPTIONS																								
<p><b>-04SP3 = BNC</b> Straight Plug (10µ" (0.25 µm)) Gold on Center Contact, Nickel on Shell)</p>		<p><b>-01PN1 = SMA</b> 4-Hole Panel Mount Jack (30µ" (0.76 µm)) Gold on Center Contact, Gold Flash on Shell)</p>		<p><b>-SING = Single Ended</b> (End 2 Callout)</p>																								
<p><b>-05SP3 = TNC</b> Straight Plug (10µ" (0.25 µm)) Gold on Center Contact, Nickel on Shell)</p>		<p><b>-04BJ2 = BNC</b> Bulkhead Jack (30µ" (0.76 µm)) Gold on Center Contact, Nickel on Shell)</p>		<p><b>XXXXXX = Stripped &amp; Tinned</b> (End 2 Callout)</p>																								
<p><b>-07BJ1 = SMB</b> Bulkhead Jack (30µ" (0.76 µm)) Gold on Center Contact, Gold flash on Shell)</p>		<p><b>-05BJ3 = TNC</b> Bulkhead Jack (10µ" (0.25 µm)) Gold on Center Contact, Nickel on Shell)</p>		<p><b>STRIPPED &amp; TINNED</b> (Dimensions in mm)</p> <table><tr><th>CALLOUT</th><th>A</th><th>B</th><th>C</th></tr><tr><td><b>-303030</b></td><td>3.0</td><td>3.0</td><td>3.0</td></tr><tr><td><b>-303040</b></td><td>3.0</td><td>3.0</td><td>4.0</td></tr><tr><td><b>-403030</b></td><td>4.0</td><td>3.0</td><td>3.0</td></tr><tr><td><b>-403040</b></td><td>4.0</td><td>3.0</td><td>4.0</td></tr><tr><td><b>-404040</b></td><td>4.0</td><td>4.0</td><td>4.0</td></tr></table>	CALLOUT	A	B	C	<b>-303030</b>	3.0	3.0	3.0	<b>-303040</b>	3.0	3.0	4.0	<b>-403030</b>	4.0	3.0	3.0	<b>-403040</b>	4.0	3.0	4.0	<b>-404040</b>	4.0	4.0	4.0
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<p><b>-01BJ1 = SMA</b> Straight Bulkhead Jack <b>-01SB1 = SMA</b> Straight Bulkhead Jack, Sealed <b>-01SR1 = SMA</b> Straight Bulkhead Jack, Sealed, Reversed Polarity <b>-01BR1 = SMA</b> Straight Bulkhead Jack, Reversed Polarity  (30µ" (0.76 µm)) Gold on Center Contact, Gold Flash on Shell)</p>		<p><b>-06BJ2 = N Type</b> Bulkhead Jack (30µ" (0.76 µm)) Gold on Center Contact, Nickel on Shell)</p>		<p>Both center conductor and braid shield are stripped, only the center conductor is tinned.</p>																								

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