

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, NTPPE

## 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)



Standard performance 26 AWG RG 174 coax cable

2.3dK

Plugs and Jacks

Straight or Right Angle

Single or Double Ended

CABLE TYPE

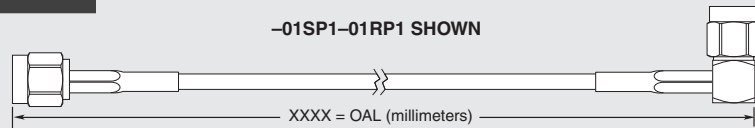
END 1 CONNECTOR

END 2 CONNECTOR

**RF174**  
 = RG 174 Cable

Specify END OPTIONS from chart

-01SP1-01RP1 SHOWN

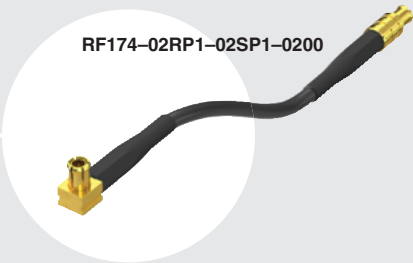


END OPTIONS	
-01SP1 = SMA Straight Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-01RP1 = SMA Right Angle Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-07SP1 = SMB Straight Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-07RP1 = SMB Right Angle Plug (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	
-02SJ1 = MCX Straight Jack (30μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)	

END OPTIONS	
-02RP1 = MCX 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)	
-03SP1 = MMCX Straight 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)	
-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**



**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.



**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>-04SP3 = BNC Straight Plug (10µ" (0.25 µm) Gold on Center Contact, Nickel on Shell)</p>		<p>-01PN1 = SMA 4-Hole Panel Mount Jack (30µ" (0.76 µm) Gold on Center Contact, Gold Flash on Shell)</p>		<p>-SING = Single Ended (End 2 Callout)</p>																								
<p>-05SP3 = TNC Straight Plug (10µ" (0.25 µm) Gold on Center Contact, Nickel on Shell)</p>		<p>-04BJ2 = BNC Bulkhead Jack (30µ" (0.76 µm) Gold on Center Contact, Nickel on Shell)</p>		<p>XXXXXX = Stripped &amp; Tinned (End 2 Callout)</p>																								
<p>-07BJ1 = SMB Bulkhead Jack (30µ" (0.76 µm) Gold on Center Contact, Gold flash on Shell)</p>		<p>-05BJ3 = TNC 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 border="1"> <thead> <tr> <th>CALLOUT</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>-303030</td> <td>3.0</td> <td>3.0</td> <td>3.0</td> </tr> <tr> <td>-303040</td> <td>3.0</td> <td>3.0</td> <td>4.0</td> </tr> <tr> <td>-403030</td> <td>4.0</td> <td>3.0</td> <td>3.0</td> </tr> <tr> <td>-403040</td> <td>4.0</td> <td>3.0</td> <td>4.0</td> </tr> <tr> <td>-404040</td> <td>4.0</td> <td>4.0</td> <td>4.0</td> </tr> </tbody> </table> <p>Both center conductor and braid shield are stripped, only the center conductor is tinned.</p>	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
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<p>-01BJ1 = SMA Straight Bulkhead Jack -01SB1 = SMA Straight Bulkhead Jack, Sealed -01SR1 = SMA Straight Bulkhead Jack, Sealed, Reversed Polarity -01BR1 = SMA Straight Bulkhead Jack, Reversed Polarity (30µ" (0.76 µm) Gold on Center Contact, Gold Flash on Shell)</p>		<p>-06BJ2 = N Type Bulkhead Jack (30µ" (0.76 µm) Gold on Center Contact, Nickel on Shell)</p>																										