**50 Ω RG 174 CABLE ASSEMBLIES**

**Mates with:**
- MCX, MMCX, MMCXV, SMA, SMB5, BNC5, TNC

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

**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
- **Impedance:** 50 Ω
- **Frequency Range:** 0–6 GHz (Cable & connector dependent)
- **RoHS Compliant:** Yes

**RG 174 Cable**
- **Impedance:** 50 Ω
- **Capacitance:** 101.024 pF/meter
- **Max Attenuation (cable only):** 1.4 dB @ 1 GHz for 1 meter
- **Conductor Size:** 26 AWG (0.48 mm) .019” dia.
- **Conductor Material:** Copper
- **Insulator Material:** KLPE
- **Shield Material:** Tin Copper
- **Jacket Material:** PVC
- **Jacket Diameter:** (2.70 mm) .106”
- **Jacket Color:** Black
- **Bend Radius:** 25.4 mm
- **RoHS Compliant:** Yes

**Cable Type**
- **RF174 = RG 174 Cable**

**End Options**

<table>
<thead>
<tr>
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<tr>
<td>-01SP1 = SMA Straight Plug (30 µ” (0.76 µm) Gold on Center Contact, Gold Flash on Shell)</td>
<td>-02RP1 = MCX Right-angle Plug (30 µ” (0.76 µm) Gold on Center Contact, Gold Flash on Shell)</td>
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**Due to technical progress, all designs, specifications and components are subject to change without notice.**

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Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.
RF174 SERIES

Standard heat shrink wraps
Variety of Bulkhead Jacks

RF174–04BJ2–07SP1–0100
RF174–02RP1–02SP1–0200
RF174–03RP1–07RP1–0200

Choice of RF connector styles
Heavy Gold plated
Standard heat shrink wraps

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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.

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ALSO AVAILABLE
(MOQ Required)
• Additional stripping and tinning options
• IP67 TNC option
• Additional plating options
• Additional end connector combinations
• Knurled nuts with BNC option

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

-04P3 = BNC
Straight Plug
(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)

-07BJ1 = SMB
Bulkhead Jack (30 µ, 0.76 µm)
Gold on Center Contact,
Gold flash on Shell)

-01BJ1 = SMA
Straight Bulkhead Jack
-01SR1 = SMA
Straight Bulkhead Jack, Sealed
-01BR1 = SMA
Straight Bulkhead Jack,
Reversed Polarity
(30 µ, 0.76 µm) Gold on Center Contact,
Gold Flash on Shell)

-01PN1 = SMA
4-Hole Panel Mount Jack
(30 µ, 0.76 µm)
Gold on Center Contact,
Gold Flash on Shell

-04BJ2 = BNC
Bulkhead Jack
(30 µ, 0.76 µm)
Gold on Center Contact,
Nickel on Shell)

-05BJ3 = TNC
Bulkhead Jack
(10 µ, 0.25 µm)
Gold on Center Contact,
Nickel on Shell)

-06BJ2 = N Type
Bulkhead Jack
(30 µ, 0.76 µm)
Gold on Center Contact,
Nickel on Shell)

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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