

50Ω RF CABLE ASSEMBLIES RF174, RF316 SERIES

SPECIFICATIONS

For complete specifications see www.samtec.com?RF174 or www.samtec.com?RF316

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)
Au plated Phosphor Bronze (BNC-J)
Au plated BeCu (SMA-J)

Insulator Material: PTFE

Operating Temperature:

-65°C to +165°C

Insulator Resistance:

5,000 MΩ

Impedance: 50Ω

Frequency Range: 0-6 GHz

RoHS Compliant: Yes

RG 174 Cable:

Impedance: 50Ω

Capacitance: 101.024pF/meter

Propagation Delay:

5.06 nsec/meter

Max Attenuation:

1.4dB @ 1GHz for 1 meter

Conductor Size:

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

Conductor Material: Copper

Conductor Resistance:

0.14Ω/meter

Current Rating: 5A DC

Insulator Material: PE

Dielectric Constant: 2.3dK

Shield Material: Tin Copper

Jacket Material: PVC

Jacket Diameter:

(2.70mm) .106"

Jacket Temp Rating:

-50°C to +90°C

Jacket Color: Black

RoHS Compliant: Yes

RG 316 Cable:

Impedance:

50Ω

Capacitance: 96.432pF/meter

Propagation Delay:

4.83 nsec/meter

Max Attenuation:

1.25dB @ 1GHz for 1 meter

Conductor Size:

26 AWG, (0.51mm) .020" dia.

Conductor Material:

Silver Plated Copper

Conductor Resistance:

0.13Ω/meter max

Current Rating: 5A DC

Insulator Material: PTFE

Dielectric Constant: 2.1dK

Shield Material:

Silver Plated Copper Clad Steel

Jacket Material: FEP

Jacket Diameter:

(2.54mm) .100"

Jacket Temp Rating:

-50°C to +250°C

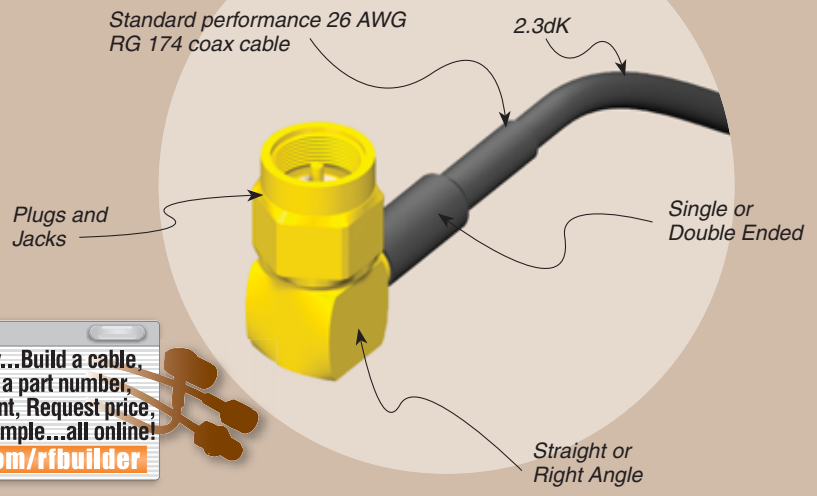
Jacket Color: Amber

RoHS Compliant: Yes

RF Cable Builder

Quickly...Build a cable.
Verify a part number.
View print, Request price,
Order sample...all online!

www.samtec.com/rfbuilder



CABLE TYPE	END 1 CONNECTOR	END 2 CONNECTOR
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RF174
= RG 174 Cable

RF316
= RG 316 Cable

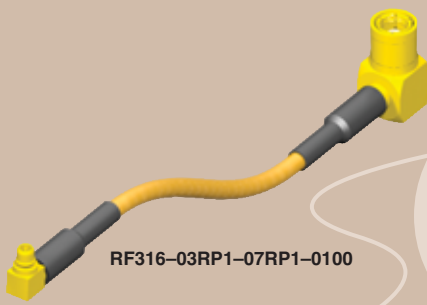
Specify END OPTIONS from chart

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

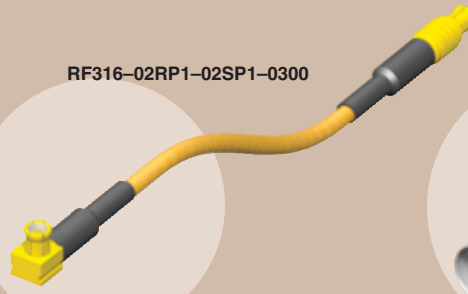
END OPTIONS	
-02RP1 = MCX, Right Angle Plug (30μ" (0.76μm) Gold on Center Contact, Gold Flash on Shell)	
-02SP1 = MCX, Straight Plug (30μ" (0.76μm) Gold on Center Contact, Gold Flash on Shell)	
-03SP1 = MMCX, Straight Plug (30μ" (0.76μm) Gold on Center Contact, Gold Flash on Shell)	
-03RP1 = MMCX, Right Angle Plug (30μ" (0.76μm) Gold on Center Contact, Gold Flash on Shell)	
-04SP3 = BNC, Straight Plug (10μ" (0.25μm) Gold on Center Contact, Nickel on Shell)	
-05SP3 = TNC, Straight Plug (10μ" (0.25μm) Gold on Center Contact, Nickel on Shell)	

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

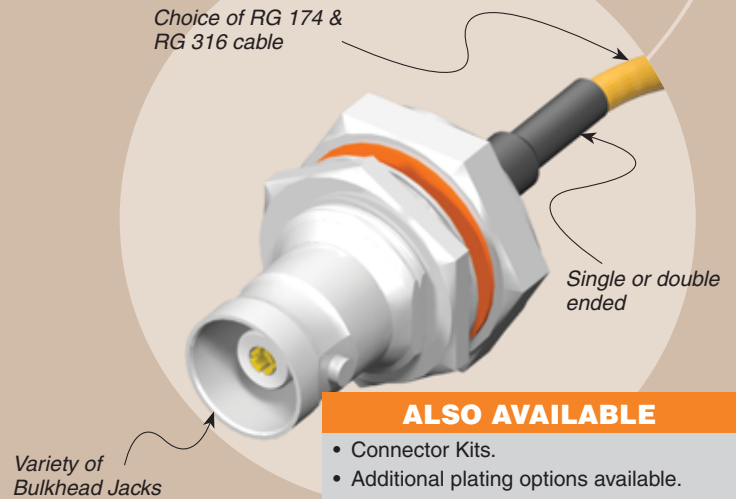
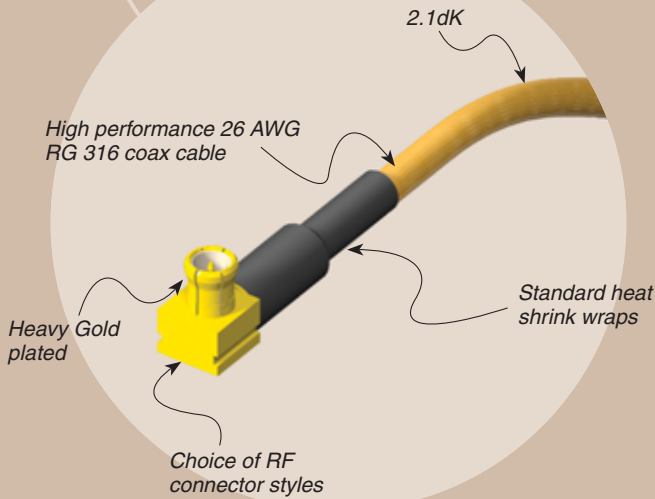
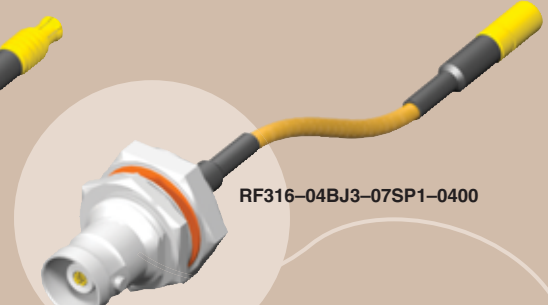
WWW.SAMTEC.COM



RF316-02RP1-02SP1-0300



RF316-04BJ3-07SP1-0400



ALSO AVAILABLE

- Connector Kits.
- Additional plating options available.
- Additional end connector combinations. Call Samtec.

OVERALL LENGTH

—“XXXX”

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

END OPTIONS	
-07BJ1 = SMB, Bulkhead Jack (30µ" (0,76µm) Gold on Center Contact, Gold Flash on Shell)	
-01BJ1 = SMA, Straight Bulkhead Jack	
-01BR1 = SMA, Straight Bulkhead Jack, Reversed Polarity (30µ" (0,76µm) Gold on Center Contact, Gold Flash on Shell)	
-01SB1 = SMA, Sealed Straight Bulkhead Jack	
-01SR1 = SMA, Sealed Bulkhead Jack, Reversed Polarity (30µ" (0,76µm) Gold on Center Contact, Gold Flash on Shell)	

END OPTIONS	
-SING = Single-Ended (End 2 only)	
XXXXXX = Stripped & Tinned (End 2 callout)	

END OPTIONS	
-04BJ3 = BNC, Bulkhead Jack (10µ" (0,25µm) Gold on Center Contact, Nickel on Shell)	
-05BJ3 = TNC, Bulkhead Jack (10µ" (0,25µm) Gold on Center Contact, Nickel on Shell)	
-06BJ2 = N Type, Bulkhead Jack (30µ" (0,76µm) Gold on Center Contact, Nickel on Shell)	

STRIPPED & TINNED CALLOUT
-XX XX XX A B C
Where XX = length in mm (0.0mm to 9.9mm)

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