

RF316-07SP1-07BJ1-0200

RF174-01RP1-02RP1-0300

RF174, RF316 SERIES

50Ω RG 174 & RG 316 CABLE ASSEMBLIES

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:
RF174: -50°C to +90°C
RF316: -50°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 +165°C
Jacket Color: Amber
RoHS Compliant: Yes

Mates with:
MCX, MMCX,
SMA, SMB5



Standard performance 26 AWG
RG 174 coax cable

2.3dK

Plugs and
Jacks

Single or
Double Ended

Straight or
Right Angle

**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**

Specify
END OPTIONS
from chart

RF174
= RG 174 Cable

RF316
= RG 316 Cable

END OPTIONS	
-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.

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High performance 26 AWG
RG 316 coax cable

2.1dK

Standard heat
shrink wraps

Heavy Gold
plated

Choice of RF
connector styles

ALSO AVAILABLE

- Connector Kits.
 - Additional plating options available.
 - Additional end connector combinations.
 - Knurled nuts with BNC option.
- Call Samtec.

Choice of RG 174 &
RG 316 cable

Single or
double ended

Variety of
Bulkhead Jacks

OVERALL LENGTH

—“XXXX”

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

**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 and Tinned.
Call Samtec for other sizes.

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)	

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)	

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