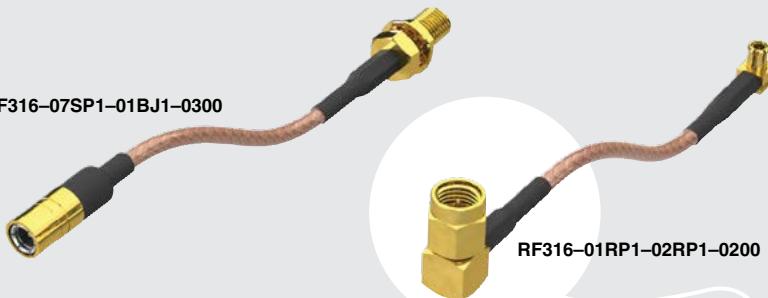


RF316-07SP1-01BJ1-0300



RF316-01RP1-02RP1-0200

# 50 Ω RG 316 CABLE ASSEMBLIES

## SPECIFICATIONS

For complete specifications see  
[www.samtec.com?RF316](http://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 & SMA-J)  
 Au plated Phos. Bronze (BNC-J)

### Insulator Material:

PTFE

### Operating Temperature:

-50 °C to +165 °C

### Impedance:

50 Ω

### Frequency Range:

0-6 GHz  
 (Cable & connector dependent)

### RoHS Compliant:

Yes

### RG 316 Cable:

#### Impedance:

50 Ω

#### Capacitance:

96.432 pF/meter

#### Max Attenuation (cable only):

1.25 dB @ 1 GHz for 1 meter

#### Conductor Size:

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

#### Conductor Material:

Silver Plated Copper

#### Insulator Material:

PTFE

#### Shield Material:

Silver Plated Copper Clad Steel

#### Jacket Material:

FEP

#### Jacket Diameter:

(2.54 mm) .100"

#### Jacket Color:

Amber

#### Bend Radius:

12.7 mm

#### RoHS Compliant:

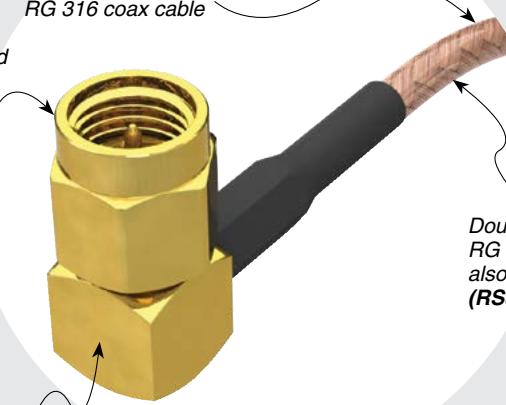
Yes

## Mates with:

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

High performance 26 AWG  
 RG 316 coax cable

Plugs and  
 Jacks



Double shielded  
 RG 316 cable  
 also available  
 (RS316 Series)



**Solutionator**  
 DESIGN IN A MINUTE

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

## CABLE TYPE

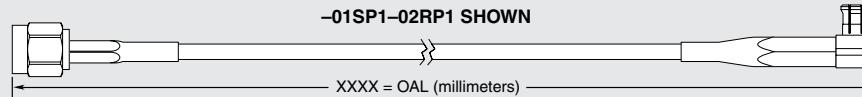
**RF316**  
 = RG 316 Cable,  
 Single Braid Shield

## END 1 CONNECTOR

## END 2 CONNECTOR

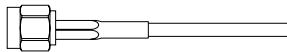
Specify END OPTIONS from chart

-01SP1-02RP1 SHOWN



## END OPTIONS

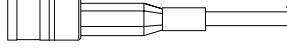
-01SP1 = SMA  
 Straight Plug  
 (30 μ" (0.76 μm)  
 Gold on Center Contact,  
 Gold Flash on Shell)



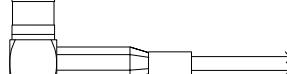
-01RP1 = SMA  
 Right-angle Plug  
 (30 μ" (0.76 μm)  
 Gold on Center Contact,  
 Gold Flash on Shell)



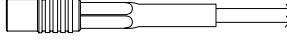
-07SP1 = SMB  
 Straight Plug  
 (30 μ" (0.76 μm)  
 Gold on Center Contact,  
 Gold Flash on Shell)



-07RP1 = SMB  
 Right-angle Plug  
 (30 μ" (0.76 μm)  
 Gold on Center Contact,  
 Gold Flash on Shell)

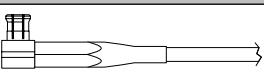


-02SJ1 = MCX  
 Straight Jack  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Gold Flash on Shell)



## END OPTIONS

-02RP1 = MCX  
 Right-angle Plug  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Gold Flash on Shell)



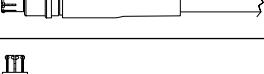
-02SP1 = MCX  
 Straight Plug  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Gold Flash on Shell)



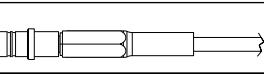
-03SP1 = MMCX  
 Straight Plug  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Gold Flash on Shell)



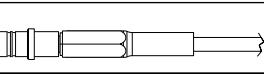
-03RP1 = MMCX  
 Right-angle Plug  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Gold Flash on Shell)



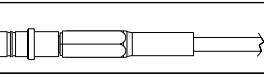
-V3SP1 = MMCXV  
 Straight Plug, High Vibration  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Nickel on Shell)



-V3RP1 = MMCXV  
 Right-angle Plug, High Vibration  
 (30 μ" (0.76 μm) Gold on Center  
 Contact, Nickel on Shell)



-V3SJ1 = MMCXV  
 Straight Jack, High Vibration  
 (30 μ" (0.76 μm) 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**

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.



RF316-02RP1-02SP1-0200



RF316-04BJ2-07SP1-0100

## RF316 SERIES



### ALSO AVAILABLE (MOQ Required)

- Additional stripping and tinning options
- IP68 Sealed AccliMate™ end options
- IP67 TNC option
- Additional plating options
- Additional end connector combinations
- Knurled nuts with BNC option



## 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	
—04SP3 = BNC Straight Plug (10 $\mu$ " (0.25 $\mu$ m) Gold on Center Contact, Nickel on Shell)	
—05SP3 = TNC Straight Plug (10 $\mu$ " (0.25 $\mu$ m) Gold on Center Contact, Nickel on Shell)	
—07BJ1 = SMB Bulkhead Jack (30 $\mu$ " (0.76 $\mu$ m) Gold on Center Contact, Gold Flash on Shell)	
—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 (30 $\mu$ " (0.76 $\mu$ m) Gold on Center Contact, Gold Flash on Shell)	

END OPTIONS	
—01PN1 = SMA 4-Hole Panel Mount Jack (30 $\mu$ " (0.76 $\mu$ m) Gold on Center Contact, Gold Flash on Shell)	
—04BJ2 = BNC Bulkhead Jack (30 $\mu$ " (0.76 $\mu$ m) Gold on Center Contact, Nickel on Shell)	
—05BJ3 = TNC Bulkhead Jack (10 $\mu$ " (0.25 $\mu$ m) Gold on Center Contact, Nickel on Shell)	
—06BJ2 = N Type Bulkhead Jack (30 $\mu$ " (0.76 $\mu$ m) Gold on Center Contact, Nickel on Shell)	

END OPTIONS	
—SING = Single Ended (End 2 Callout)	
XXXXXX = Stripped & Tinned (End 2 Callout)	

### 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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