

RF316-07SP1-01BJ1-0300

RF316-01RP1-02RP1-0200

# 50 Ω RG 316 CABLE ASSEMBLIES

## SPECIFICATIONS

For complete specifications see  
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



**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

High performance 26 AWG  
RG 316 coax cable

Plugs and  
Jacks

Double shielded  
RG 316 cable  
also available  
(RS316 Series)

Straight or  
Right-angle

CABLE TYPE

END 1  
CONNECTOR

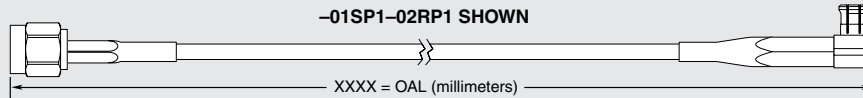
END 2  
CONNECTOR

Specify END OPTIONS from chart

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

-01SP1-02RP1 SHOWN

XXXX = OAL (millimeters)



#### 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)	

## OTHER SOLUTIONS

- Double shielded RG 316 cable available, see RS316 Series
- Cable connector kits (see cable components catalog pages)

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

[WWW.SAMTEC.COM](http://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.



RF316-03RP1-07RP1-0200

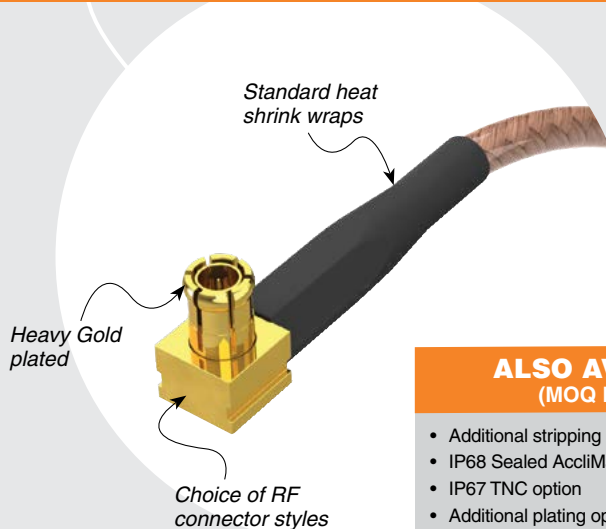


RF316-02RP1-02SP1-0200



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

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[RF316-04SP3-02SP1-0500](#) [RF316-01SP1-SING-0300](#) [RF316-01SP1-05BJ3-0200](#) [RF316-02RP1-SING-0300](#) [RF316-02RP1-05BJ3-0200](#)