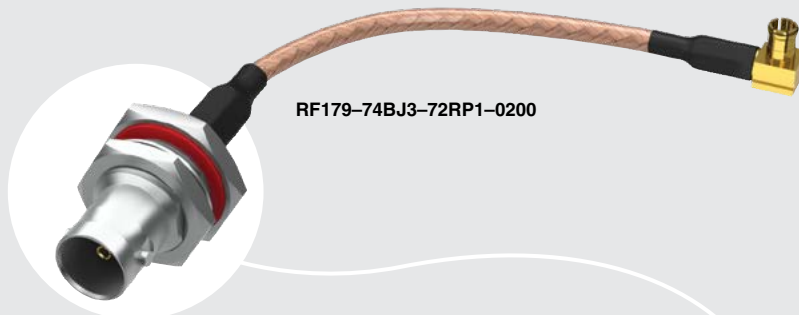




# 75 Ω OPTIMIZED RG 179 CABLES

## SPECIFICATIONS

For complete specifications see [www.samtec.com?RF179](http://www.samtec.com?RF179)

### RF Connector:

#### Outer Contact Material:

Ni plated Brass

(BNC)

Au plated Brass

(SMB)

Au plated BeCu

(MCX, MMCX7, DIN)

#### Center Contact Material:

Au plated Brass

(BNC-P, MCX, MMCX7)

Au plated BeCu

(SMB)

Au plated Copper Alloy

(DIN, BNC-J)

#### Insulator Material:

PTFE

#### Operating Temperature:

-50 °C to +165 °C

#### Impedance:

75 Ω

#### Frequency Range:

0~4 GHz \*

(Cable & connector dependent)

#### RoHS Compliant:

Yes

### RG 179 Cable:

#### Impedance:

75 Ω ±3 Ω

#### Capacitance:

64 pF/meter

#### Propagation Delay:

4.83 nsec/meter

#### Max Attenuation

(cable only):

0.8 dB @ 1 GHz for 1 meter

#### Conductor Size:

30 AWG, (0.31 mm) .012" dia.

#### Conductor Material:

Silver Plated Copper

#### Conductor Resistance:

0.34 Ω/meter max

#### Current Rating:

3 A DC

#### Insulator Diameter:

(1.6 mm) .063"

#### Insulator Material:

PTFE

#### Dielectric Constant:

1.8 dK

#### Shield Material:

Silver Plated Copper

#### Jacket Material:

FEP

#### Jacket Diameter:

(2.54 mm) .100"

#### Bend Radius:

10.2 mm

#### Jacket Temp Rating:

-50 °C to +165 °C

#### Jacket Color:

Amber

#### RoHS Compliant:

Yes

### Mates with:

BNC7T, MCX7, MMCX7,  
SMB7H, DIN7A



**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)

\* See connector component pages for specific range.

30 AWG  
75 Ω RG 179  
coax cable

Standard  
Heat Shrink

Single or Double  
Ended

## CABLE TYPE

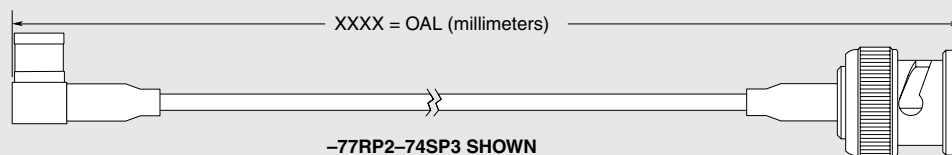
## END 1 CONNECTOR

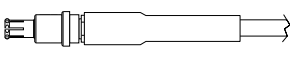
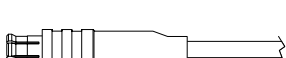
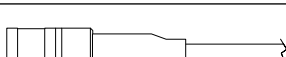
## END 2 CONNECTOR

### RF179

= RG 179 Cable

Specify END OPTIONS from chart



| END OPTIONS                                                                                              |                                                                                     | END OPTIONS                                                                                            |                                                                                       |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| -73SP4 = 75 Ω MMCX7<br>Straight Plug<br>(10 μ" (0.25 μm) Gold on Center Contact, Gold Flash on Shell)    |  | -72RP1 = 75 Ω MCX<br>Right-angle Plug<br>(30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell) |  |
| -73RP1 = 75 Ω MMCX7<br>Right-angle Plug<br>(30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell) |  | -72SP1 = 75 Ω MCX<br>Straight Plug<br>(30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)    |  |
| -73SJ4 = 75 Ω MMCX7<br>Straight Jack<br>(10 μ" (0.25 μm) Gold on Center Contact, Gold Flash on Shell)    |  | -77SP1 = 75 Ω SMB<br>Straight Plug<br>(30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)    |  |

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.



RF179-78SP4-77SP1-0200



RF179-72SP1-73SJ4-0100

## RF179 SERIES



Wide variety of 75  $\Omega$  end options including BNC, MCX and SMB

Straight or Right-angle terminations



### ALSO AVAILABLE (MOQ Required)

- Additional stripping and tinning options
- Additional plating options
- Additional end connector combinations

### OTHER SOLUTIONS

- Cable connector kits (see cable components catalog pages)

## OVERALL LENGTH

—“XXXX”

= Overall Length in millimeters -0100 (100 mm) 3.94" minimum

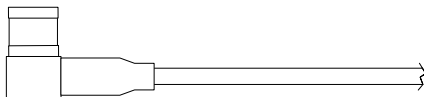
### STRIPPED & TINNED (Dimensions in mm)

| 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 |

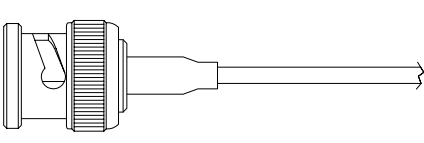
Both center conductor and braid shield are stripped, only the center conductor is tinned.

### END OPTIONS

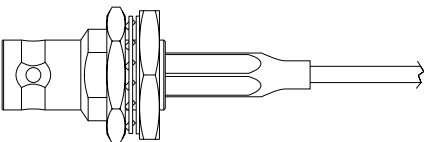
-77RP1 = 75  $\Omega$  SMB  
Right-angle Plug  
(30  $\mu$ " (0.76  $\mu$ m) Gold on Center Contact, Gold Flash on Shell)



-74SP3 = 75  $\Omega$  BNC  
Straight Plug  
-D4SP3 = 75  $\Omega$  BNC  
Die Cast Straight Plug  
(10  $\mu$ " (0.25  $\mu$ m) Gold on Center Contact, Nickel on Shell)

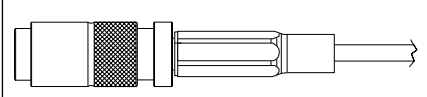


-74BJ3 = 75  $\Omega$  BNC  
Bulkhead Jack  
(10  $\mu$ " (0.25  $\mu$ m) Gold on Center Contact, Nickel on Shell)

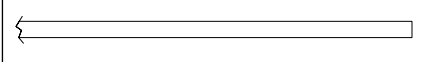


### END OPTIONS

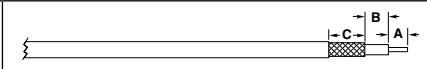
-78SP4 = 75  $\Omega$  DIN  
Straight Plug  
(10  $\mu$ " (0.25  $\mu$ m) Gold on Center Contact, Nickel on Shell)



-SING =  
Single Ended  
(End 2 callout)



XXXXXX =  
Stripped & Tinned  
(End 2 callout)



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.