



RFA6T-74SP3-74SP3-0300

## RFA6T, RFB6T SERIES

# 75 Ω OPTIMIZED BNC CABLE ASSEMBLIES

## SPECIFICATIONS

For complete specifications see [www.samtec.com?RFA6T](http://www.samtec.com?RFA6T) or [www.samtec.com?RFB6T](http://www.samtec.com?RFB6T)

### RF Connector:

**Outer Contact Material:**  
Ni plated Brass (BNC),  
Au plated BeCu (DIN),  
Au plated Phosphor Bronze (HDBNC)

**Center Contact Material:**  
Gold plated Brass

**Insulator Material:**  
PTFE

**Operating Temperature:**  
-65 °C to +125 °C

**Impedance:**

75 Ω ± 3 Ω (-ST)

75 Ω ± 4 Ω (-RA)

**Frequency Range:**  
0-3.5 GHz \*

**Working Voltage:**  
500 Vrms max \*

**Dielectric Withstanding:**  
1500 Vrms min \*

**RoHS Compliant:**  
Yes

### RG 6/1694A Cable:

**Impedance:**

75 Ω ± 3 Ω

**Capacitance:**

54 ± 3 pF/meter

**Max Attenuation**

(cable only):

0.21 dB @ 1 GHz for 1 meter

**Conductor Size:**

18 AWG, (1.02 mm) .040" dia.

**Conductor Material:**

Bare Copper

**Insulator Material:**

Gas Injected Foamed

Polyethylene

**Shield Material:**

Tinned Copper Braid over

Aluminum Foil Wrap

**Jacket Material:**

PVC

**Jacket Diameter:**

(7.00 mm) .275"

**Bend Radius:** 69.85 mm

**Jacket Color:** Black

**RoHS Compliant:** Yes

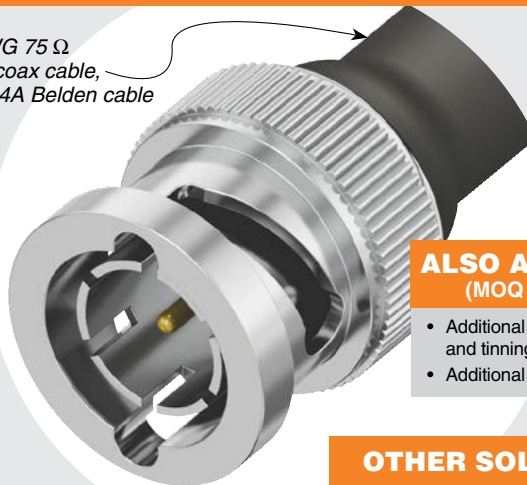
**Mates with:**  
BNC7T, DIN7A, HDBNC



**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)

18 AWG 75 Ω  
RG 6 coax cable,  
or 1694A Belden cable



### ALSO AVAILABLE (MOQ Required)

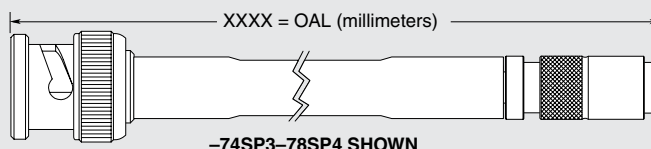
- Additional stripping and tinning options
- Additional plating options

### OTHER SOLUTIONS

- Hand tool available. Contact [RFGroup@samtec.com](mailto:RFGroup@samtec.com)
- Cable connector kits (see cable components catalog pages)

\* See connector component pages for specific range.

CABLE TYPE	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RFA6T = RG 6 Cable	Specify END OPTIONS from chart		— "XXXX" = Overall Length in millimeters -0300 (300 mm) 11.81" minimum
RFB6T = Belden 1694A Cable			



-74SP3-78SP4 SHOWN

### 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		END OPTIONS	
-H4SP3 = 75 Ω High-Density BNC Straight Plug (10 μ" (0.25 μm) Gold on Center Contact, Nickel on Shell)		-74RP3 = 75 Ω BNC Right-angle Plug (10 μ" (0.25 μm) Gold on Center Contact, Nickel on Shell)	
-78SP4 = 75 Ω DIN Straight Plug (10 μ" (0.25 μm) Gold on Center Contact, Nickel on Shell)		-SING = Single Ended (End 2 callout)	
-74SP3* = 75 Ω BNC Straight Plug (10 μ" (0.25 μm) Gold on Center Contact, Nickel on Shell)		-XXXXXX = Stripped & Tinned (End 2 callout) (See chart for callout)	
(*Die Cast also available = -D4SP3)			

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Samtec:

[RFA6T-74RP3-74RP3-0300](#)