

**RF178 SERIES**

# 50Ω RG 178 CABLE ASSEMBLIES

**SPECIFICATIONS**

For complete specifications see [www.samtec.com?RF178](http://www.samtec.com?RF178)

**RF Connector:**

**Outer Contact Material:**  
Au plated Brass (SMA)  
Au plated BeCu (MCX & MMCX)

**Center Contact Material:**

Au plated Brass (MCX-P & MMCX-P)  
Au plated BeCu (SMA-J & MCX-J)

**Insulator Material:**  
PTFE

**Operating Temperature:**  
-50°C to +165°C

**Frequency Range:** 0-5 GHz (Connector dependent)

**Insulator Resistance:**  
5,000 MΩ

**Impedance:**  
50Ω

**RoHS Compliant:**  
Yes

**RG 178 Cable:**

**Impedance:**  
50Ω

**Capacitance:**  
89.61 pF/meter

**Propagation Delay:**  
4.83 nsec/meter

**Max Attenuation (cable only):**  
1.7dB @ 1GHz for 1 meter

**Conductor Size:**  
30 AWG, (0,31mm) .012" dia.

**Conductor Material:**  
Silver Plated Copper

**Conductor Resistance:**  
0.34Ω/meter max

**Current Rating:**  
3A DC

**Insulator Diameter:**  
(0,86mm) .034"

**Insulator Material:**  
PTFE

**Dielectric Constant:**  
2.1dK

**Shield Material:**  
Silver Plated Copper Clad Steel

**Jacket Material:**  
FEP

**Jacket Diameter:**  
(1,80mm) .071"

**Jacket Temp Rating:**  
-50°C to +165°C

**Jacket Color:**  
Amber

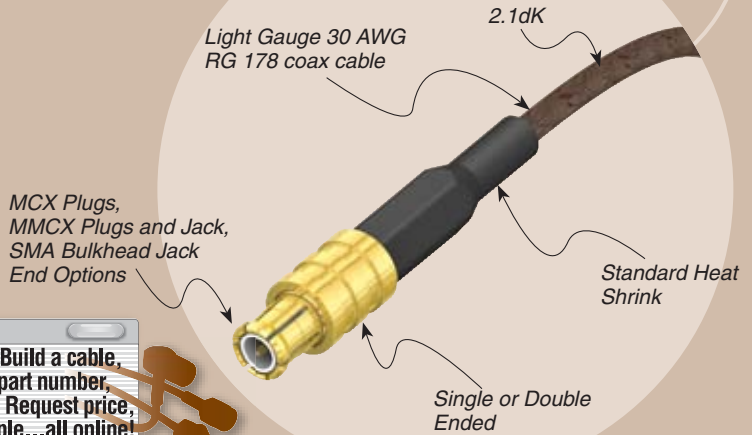
**RoHS Compliant:** Yes

**Mates with:**  
MCX, MMCX

**RF Cable Builder**

Quickly...Build a cable.  
Verify a part number.  
View print, Request price,  
Order sample...all online!

[www.samtec.com/rfbuilder](http://www.samtec.com/rfbuilder)



CABLE TYPE	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF178 = RG 178 Cable	Specify END OPTIONS from chart		— "XXXX" = Overall Length in millimeters -0100 (100mm) 3.94" minimum

**ALSO AVAILABLE**

- Connector Kits.
- Additional end connector combinations.
- Additional plating options available. Call Samtec.

END OPTIONS	
-01BJ1 = SMA, Straight Bulkhead Jack	
-01BR1 = SMA, Straight Bulkhead Jack, Reversed Polarity (30μ" (0,76μm) Gold on Center Contact, Gold Flash on Shell)	
-02SJ1 = MCX, Straight Jack (30μ" (0,76μm) Gold on Center Contact, Gold Flash on Shell)	
-02RP1 = MCX, Right Angle Plug (30μ" (0,76μm) Gold on Center Contact, Gold Flash on Shell)	

END OPTIONS	
-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)	
-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. Call Samtec for other sizes or tinning options.

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

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