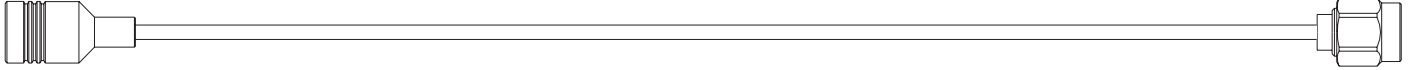
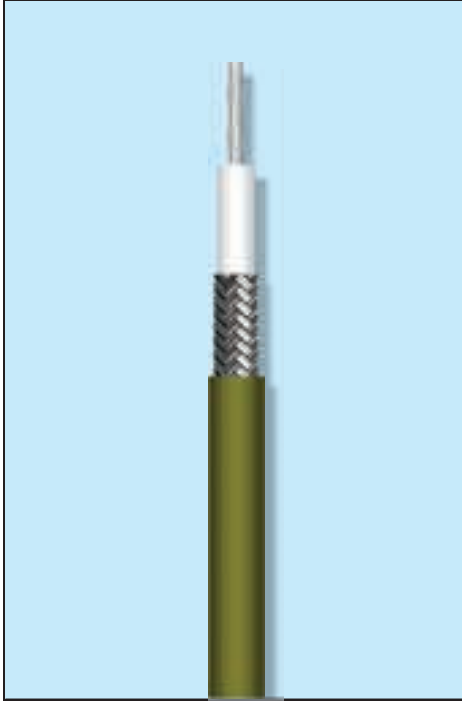


CABLE ASSEMBLIES

FLEXIBLE CABLE 2.6/75 S (RG179)



MIL-C-17/94-RG179 → Radiall p/n : C291 210 007 **S+**



CONSTRUCTION / DIMENSIONS

	material	mm	inches
center conductor	stranded SP CC S ⁽¹⁾	0,30	0,012
dielectric	solid PTFE ⁽²⁾	1,60	0,063
inner shield	SPC ⁽³⁾ braid	2,00	0,079
outer shield	-	-	-
jacket	brown FEP ⁽⁴⁾	2,54	0,100

ELECTRICAL CHARACTERISTICS

characteristic impedance	75 Ω ± 3 Ω	
operating frequency range	DC - 3 GHz	
shielding effectiveness	40 dB	
voltage withstanding	2 000 V rms	
peak power	1.6 kW	
capacitance	69 pF / m	21 pF / ft
velocity of propagation	70% (4.8 ns / m)	

MECHANICAL CHARACTERISTICS

recommend. min. bend radius	10 mm	0.400 inch
weight	14.5 g / m	0.0097 lbs / ft

APPLICATION NOTE

Due to its 75 Ω characteristic impedance, RG179 is rather dedicated to TV/Video application.

Its small internal stranded inner conductor diameter allows high flexibility for an easy routing.

Usable in severe thermal conditions.

ENVIRONMENTAL CHARACTERISTICS

operating temperature range	-55 / +200 °C	-67 / +392 °F
fire resistance	yes (C SA FT6 / IEC 332-2)	
halogen free	no	

FREQUENCY / ATTENUATION (typ.) / CW MAX POWER (sea level / 25°C)

GHz	dB / m	dB / ft	Watts
0,1	0,29	0,09	791
0,2	0,41	0,13	559
0,3	0,51	0,15	456
0,5	0,66	0,20	354
1,0	0,95	0,29	250
1,5	1,17	0,36	204
2,0	1,37	0,41	177
2,5	1,54	0,47	158
3,0	1,70	0,51	144
attenuation calculation (dB/m)	$(0.91 \times \sqrt{F} \text{ GHz}) + (0.04 \times F \text{ GHz})$		
power calculation (W)	$250 / \sqrt{F} \text{ GHz}$		

⁽¹⁾ SPCCS = Silver Plated Copper Covered Steel

⁽²⁾ PTFE = Poly TetraFluoroEthylene

⁽³⁾ SPC = Silver Plated Copper

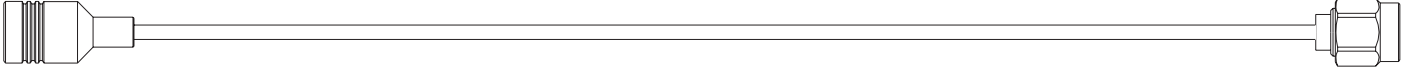
⁽⁴⁾ FEP = Fluorinated Ethylene Propylene

Note : typical attenuation for a couple of connectors (dB) = $0.045 \times \sqrt{F} \text{ GHz}$

S+ : for the  program, please read page 88.

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLE 2.6/75 S (RG179)



MCX 75 Ω series

(temperature range = -55 / +155 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R213 082 007	plug	straight	full crimp	6	750	yes	brass	BBR	
R213 182 007	plug	right angle	crimp	6	750	yes	brass	BBR	
R213 238 007	jack	straight	full crimp	6	750	yes	brass	BBR	

SMBseries (50 Ω interface)

(temperature range = -65 / +165 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R114 075 000	female plug	straight	crimp	4	1000	yes	brass	gold	5 mm / 2 flats
R114 075 134	female plug	straight	crimp	4	1000	yes	brass	gold	5.5 mm / 2 flats
R114 082 000 	female plug	straight	full crimp	4	1000	yes	brass	gold	plastic boot compatible
R114 082 020	female plug	straight	full crimp	4	1000	yes	brass	nickel	plastic boot compatible
R114 185 000	female plug	right angle	crimp	4	1000	yes	brass	gold	reduced height
R114 185 020	female plug	right angle	crimp	4	1000	yes	brass	nickel	reduced height
R114 186 000 	female plug	right angle	crimp	4	1000	yes	brass	gold	
R114 186 020	female plug	right angle	crimp	4	1000	yes	brass	nickel	
R114 186 730	female plug	right angle	crimp	4	1000	yes	brass / zamak	nickel	zamak die-cast 1/2 body
R114 187 000	female plug	right angle	full crimp	4	1000	yes	brass	gold	standard height
R114 187 020	female plug	right angle	full crimp	4	1000	yes	brass	nickel	standard height
R114 238 000 	male jack	straight	full crimp	4	1000	yes	brass	gold	plastic boot compatible
R114 238 120	male jack	straight	full crimp	4	1000	yes	brass	nickel	plastic boot compatible
R114 239 000	male jack	straight	crimp	4	1000	yes	brass	gold	
R114 312 000	male jack	straight	full crimp	4	1000	yes	brass	gold	bulkhead feedthrough / panel nut torque = 60 Nc m
R114 313 000 	male jack	straight	full crimp	4	1000	yes	brass	gold	reduced length / bulkhead feedthrough / panel nut torque = 60 Nc m
R114 313 020	male jack	straight	full crimp	4	1000	yes	brass	nickel	reduced length / bulkhead feedthrough / panel nut torque = 60 Nc m

SMCseries (50 Ω interface) (advised torque wrench for plugs : R282 318 000 / 6 mm / 25-35 Nc m)

(temperature range = -65 / +165 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R112 075 000	female plug	straight	crimp	10	1000	yes	brass	gold / nickel	
R112 186 000	female plug	right angle	crimp	10	1000	yes	brass	gold / nickel	
R112 239 000	male jack	straight	crimp	10	1000	yes	brass	gold / nickel	
R112 307 000	male jack	straight	crimp	10	1000	yes	brass	gold / nickel	bulkhead feedthrough / panel nut torque = 60 Nc m

BNC 75 Ω series

(temperature range = -65 / +165 °C) except p/n ending in 161 = -35 / +70 °C

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R142 076 000	plug	straight	full crimp	15	1000	yes	brass	nickel	plastic boot compatible
R142 076 161 	plug	straight	crimp	15	1000	yes	brass	nickel	commercial BNC / plastic boot compatible
R142 154 000	plug	right angle	clamp	15	1000	yes	brass	nickel	
R142 202 000	jack	straight	clamp	15	1000	yes	brass	nickel	square flange 17.5 mm / 4 holes M2.5 x 0.45
R142 217 000 	jack	straight	full crimp	15	1000	yes	brass	nickel	plastic boot compatible
R142 331 011	jack	straight	crimp	15	1000	yes	brass	silver	bulkhead feedthrough / panel sealed / panel nut torque = 370 Nc m

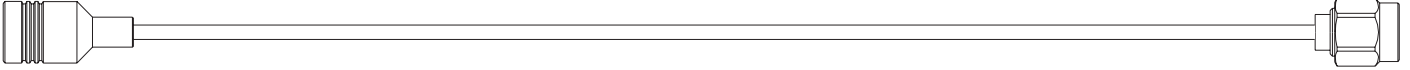


program, please read page 88.

Note : the above information is only listing recommended part-numbers. For other connectors or more information, please consult the general coax connector catalog, our web site or your current sales contact.

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLE 2.6/75 S (RG179)



TNC series (50 Ω interface)

(temperature range = -65 / +165 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R143 075 000	plug	straight	crimp	15	1000	yes	brass	nickel	plastic boot compatible
R143 181 000	plug	right angle	crimp	15	1000	yes	brass	nickel	plastic boot compatible
R143 254 000	jack	straight	clamp	15	1000	yes	brass	nickel	square flange 17.5 mm / 4 holes M2.5 x 0.45
R143 324 000	jack	straight	clamp	15	1000	yes	brass	nickel	bulkhead feedthrough / panel nut torque = 370 Nc m

terminals (50 Ω interface)

(temperature range = -55 / +155 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	material	finish	panel
R280 280 100	terminal	straight	crimp	3	2 000	brass	gold	2 solder pins
R280 280 120	terminal	straight	crimp	3	2 000	brass	BBR	2 solder pins
R280 284 000	terminal	straight	crimp	3	2 000	brass	nickel	4 solder pins
R280 294 000	terminal	right angle	crimp	3	2 000	brass	tin lead	4 solder pins
R280 294 308	terminal	right angle	crimp	3	2 000	brass	nickel + tin lead	2 solder pins

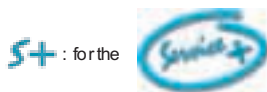
plastic boots (for SMB compatible connectors) (PVC / length = 67.54 mm)

p/n	color
R280 560 000	black
R280 560 001	red
R280 560 002	green
R280 560 003	blue
R280 560 004	yellow
R280 560 005	grey
R280 560 006	white
R280 560 007	brown
R280 560 008	orange
R280 560 009	purple
R280 560 010	translucent

plastic boots (for BNC and TNC compatible connectors) (PVC / length = 67.54 mm)

p/n	color
R280 566 000	black
R280 566 001	red
R280 566 002	green
R280 566 003	blue
R280 566 004	yellow
R280 566 005	grey
R280 566 006	white
R280 566 007	brown
R280 566 008	orange
R280 566 009	purple
R280 566 010	translucent

heatshrink sleeves : a large range of heatshrink sleeves and lab els is available : please consult us.



program, please read page 88.

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