Chinmore Industry Co., Ltd.

RG178 Cable Specification

Technical data of product			
Type of cable	RG178		
Item		No	Material and size
Inner conductor	Material	/	Silver plated copper wire
	Composition	Mm	7/0.102±0.02
	OD	Mm	Φ0.30
Insulation	Material	/	Teflon FEP(200 degrees of fluorinated ethylene propylene resin)
	Thickness	mm	0.275
	OD	mm	Φ0.85±0.05
	Color	/	Transparent color
Outer conductor	Material	/	Silver plated copper wire
	Form	/	Weave
	Density	%	92% (Coding 3*16/0.10)
	OD	mm	Φ1.25±0.05
Jacket	Material	/	Teflon FEP(200 degrees of fluorinated ethylene propylene resin)
	Thickness	mm	0.275
	OD	mm	Φ1.80±0.05
	Color of sheath	/	Ransparent color or Brown transparent color(Can also be processed according to customer requirements)

The cable properties

Test project			Standard value	Note
Rated temperature/voltage			-55℃~+200℃ / 30V	/
Insulation resistance			3000MΩ. Km	Resistance tester
Conductor resistance			345Ω/Km 20℃	/
Pressure			2KV	Withstand voltage tester
Insulation	Unaged		Tensile Strength	2500 PSI MIN(1.76Kg/mm²)
			Elongation	200% MIN
	Aged		Tensile Strength	2500 PSI*75%(168HRS/232℃)
			Elongation	200% MIN*75%(168HRS/232℃)
Jacket	Unaged		Tensile Strength	2500 PSI MIN(1.76Kg/mm²)
			Elongation	200% MIN
	Aged		Tensile Strength	2500 PSI*75%(168HRS/232℃)
			Elongation	200% MIN*75%(168HRS/232℃)
Characteristic Impedance			50±3Ω	
Capacitance			95.8 PF/M	
Velocity			69.5%	
Propagation Delay			4.8ns/m	
Shielding attenuation			100 dB	
Bending radius			<9mm	
Flame retardant			passed	
Operating temperature			-55℃~+200℃	
Working humidity			<90 %	

Attenuation of cable

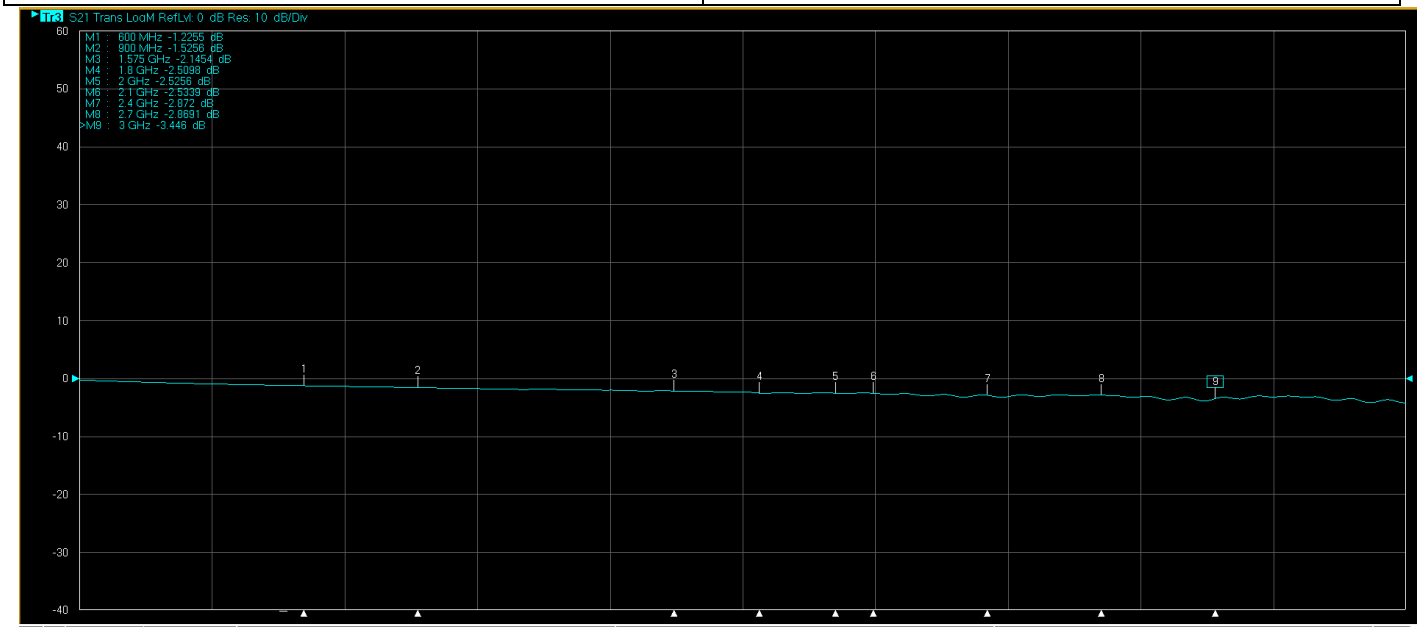
Frequency (MHz)	Attenuation(dB/1M)
600	-1.22
900	-1.52
1575	-2.14
1800	-2.50
2000	-2.52
2100	-2.53
2400	-2.87
2700	-2.86
3000	-3.44

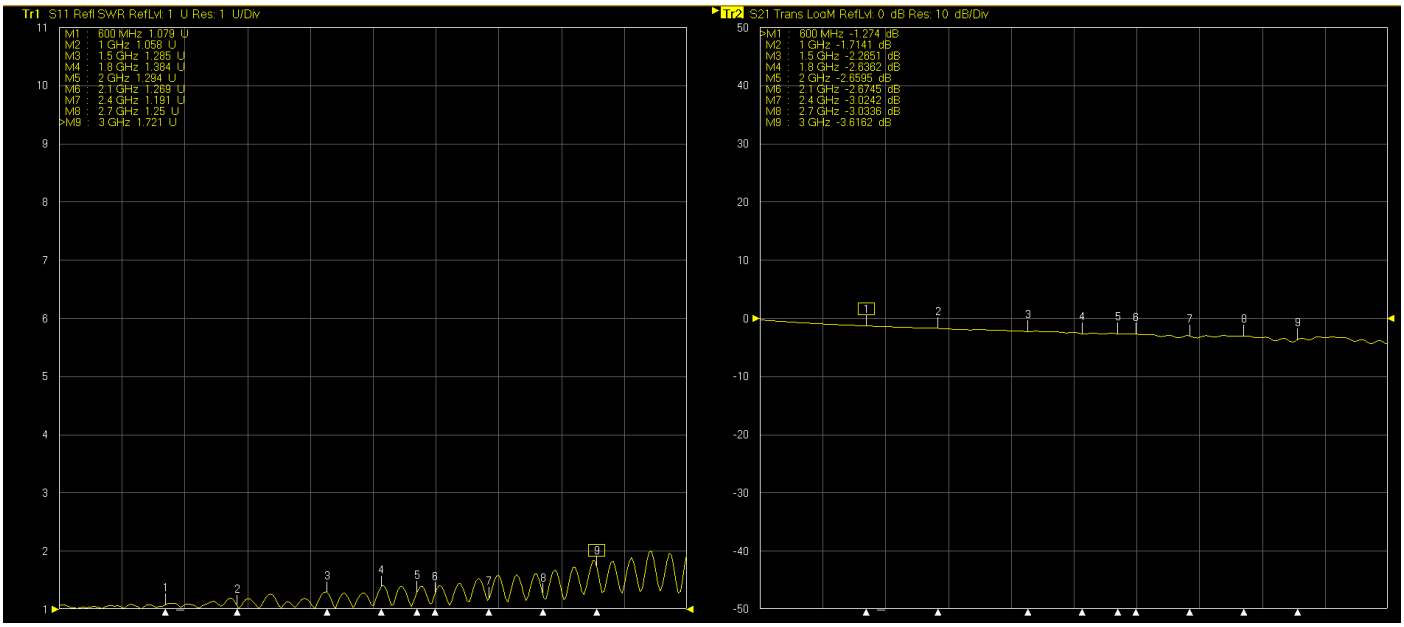
V.S.W.R.

Frequency (MHz)	Attenuation(1M)
600	1.07
900	1.05
1575	1.28
1800	1.38
2000	1.29
2100	1.26
2400	1.19
2700	1.25
3000	1.72

Return Loss

Frequency (MHz)	Attenuation(dB/1M)
600	-1.27
900	-1.71
1575	-2.26
1800	-2.63
2000	-2.65
2100	-2.67
2400	-3.02
2700	-3.03
3000	-3.61




Tr1 S11 Refl SWR RefLvl: 1 U Res: 1 U/Div
M1 : 800 MHz 1.078 U
M2 : 1 GHz 1.058 U
M3 : 1.5 GHz 1.285 U
M4 : 1.8 GHz 1.384 U
M5 : 2 GHz 1.294 U
M6 : 2.1 GHz 1.269 U
M7 : 2.4 GHz 1.191 U
M8 : 2.7 GHz 1.25 U
M9 : 3 GHz 1.721 U
11
10
9
8
7
6
5
4
3
2
1
Tr2 S21 Trans LogM RefLvl: 0 dB Res: 10 dB/Div
M1 : 800 MHz -1.274 dB
M2 : 1 GHz -1.7141 dB
M3 : 1.5 GHz -2.2651 dB
M4 : 1.8 GHz -2.8362 dB
M5 : 2 GHz -2.8595 dB
M6 : 2.1 GHz -2.8745 dB
M7 : 2.4 GHz -3.0242 dB
M8 : 2.7 GHz -3.0336 dB
M9 : 3 GHz -3.6162 dB
50
40
30
20
10
0
-10
-20
-30
-40
-50