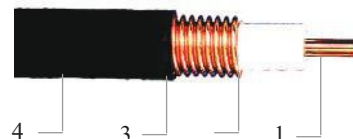


Product Specification

PART NO.	3110501 /3110502	ISSUE NO.	5
DATE OF ISSUE	5-9-2007	PAGE	5 of 10

1/2" S Superflexible physical foamed insulation coaxial cable RF 50 1/2" S

Description		TYPE No.	PART NO.
Standard cable		RF5012S	3110501
Fire retardant cable		RF5012S Z	3110502
Construction			
Inner Conductor	Material	Copper clad aluminum wire	
	Diameter, mm	3.60±0.04	
Insulation	Material	Physically foamed PE	
	Diameter, mm	8.80±0.20	
Outer conductor	Material	Helically corrugated copper	
	Diameter, mm	12.20±0.20	
Jacket	Material	PE or fire retardant PE	
	Diameter, mm	13.40 ^{+0.20} _{-0.00}	
Mechanical properties			
Bending radius , mm	Single	25	
	Repeated	30	
	Moving	200	
Pulling strength, N		800	
Crush resistance, kg/mm		1.9	
Recommend temperature , °C	Store	-70~+85	
	Installation	-40~+60	
	Operation	-55~+85	
Electrical properties			
Impedance, Ω		50±1	
Capacitance, PF/m		82	
Propagation velocity, %		81	
DC breakdown voltage, kV		2.5	
Insulation resistance, M Ω •km		>5×10 ³	
Peak power, kW		15.6	
Screening attenuation, dB		>>120	
Cut-off frequency, GHz		10.2	



1: Inner Conductor 2: Insulation
3: Outer conductor 4: Jacket

Figure 5: RF50 1/2" S coaxial cable

Attenuation and average power		
Frequency MHz	Nom. attenuation @20°C, dB/100m	Power rate @20°C, kW
10	1.04	10.1
100	3.41	3.08
200	4.91	2.14
450	7.59	1.38
800	10.4	1.01
900	11.2	0.943
1000	11.8	0.889
1500	14.9	0.705
1800	16.6	0.634
2000	17.6	0.597
2500	19.7	0.535
3000	22.4	0.469
● Maximum attenuation value shall be 105% of the nominal attenuation value		
VSWR		
800~1000MHz	≤1.15	
1700~2200MHz	≤1.15	
5~3000MHz	≤1.25	

Note:

- For fire retardant jacket, recommended temperatures are:

Store temperature	-30~+80°C
Installation temperature	-25~+60°C
Operation temperature	-30~+80°C