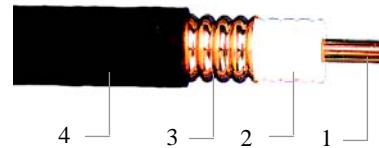


Product Specification

PART NO.	3110601 /3110602	ISSUE NO.	2
DATE OF ISSUE	5-3-2007	PAGE	1 of 4

1/2" low loss physical foamed insulation coaxial cable RF 50 1/2"

Description	TYPE No.	PART NO.
Standard cable	RF5012	3110601
Fire retardant cable	RF5012 Z	3110602
Construction		
Inner Conductor	Material	Copper clad aluminum wire
	Diameter, mm	4.80±0.05
Insulation	Material	Physically foamed PE
	Diameter, mm	12.20±0.30
Outer conductor	Material	Ring corrugated copper
	Diameter, mm	13.80±0.20
Jacket	Material	PE or fire retardant PE
	Diameter, mm	15.80±0.20
Mechanical properties		
Bending radius, mm	Single	70
	Repeated	125
	Moving	350
Pulling strength, N		1130
Crush resistance, kg/mm		2.0
Recommended temperature, °C	Store	-70~+85
	Installation	-40~+60
	Operation	-55~+85
Electrical properties		
Impedance, Ω		50 ± 1
Capacitance, PF/m		75.8
Propagation velocity, %		88
DC breakdown voltage, kV		4.0
Insulation resistance, MΩ •km		>5 × 10 ³
Peak power, kW		40
Screening attenuation, dB		>>120
Cut-off frequency, GHz		8.8



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

Figure 1: RF50 1/2" coaxial cable

Attenuation and average power		
Frequency MHz	Nom. attenuation @20°C, dB/100m	Power rate @20°C, kW
10	0.672	11.30
100	2.17	3.49
200	3.10	2.44
450	4.75	1.59
800	6.46	1.17
900	6.87	1.10
1000	7.28	1.04
1500	9.09	0.833
1800	10.10	0.753
2000	10.70	0.710
2500	12.10	0.627
3000	13.40	0.565
<ul style="list-style-type: none"> 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 cable, recommended temperatures are:

Store temperature -30~+80°C

Installation temperature -25~+60°C

Operation temperature -30~+80°C

Meet the IEC requirements according to:

IEC 60754-1、IEC60754-2

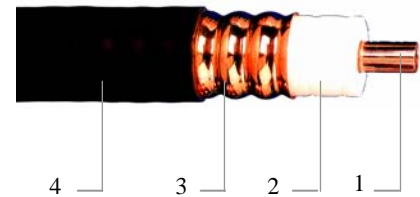
IEC 60332-1、IEC 60332-3.C、IEC 61034

Product Specification

PART NO.	3110801/3110802	ISSUE NO.	2
DATE OF ISSUE	5-3-2007	PAGE	2 of 4

7/8" low loss physical foamed insulation coaxial cable RF 50 7/8"

Description	TYPE No.	PART NO.
Standard cable	RF5078	3110801
Fire retardant cable	RF5078 Z	3110802
Construction		
Inner Conductor	Material	Smooth copper tube
	Diameter, mm	8.95±0.05
Insulation	Material	Physically foamed PE
	Diameter, mm	22.50±0.40
Outer conductor	Material	Ring corrugated copper
	Diameter, mm	24.90±0.30
Jacket	Material	PE or fire retardant PE
	Diameter, mm	27.30±0.20
Mechanical properties		
Bending radius, mm	Single	120
	Repeated	250
	Moving	500
Pulling strength, N		1470
Crush resistance, kg/mm		1.4
Recommended temperature, °C	Store	-70~+85
	Installation	-40~+60
	Operation	-55~+85
Electrical properties		
Impedance, Ω		50 ± 1
Capacitance, PF/m		75
Propagation velocity, %		88
DC breakdown voltage, kV		6.0
Insulation resistance, MΩ •km		>5 × 10 ³
Peak power, kW		91
Screening attenuation, dB		>>120
Cut-off frequency, GHz		5.0



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

Figure 2:RF50 7/8" coaxial cable

Attenuation and average power		
Frequency MHz	Nom. attenuation @20°C, dB/100m	Power rate @20°C, kW
10	0.366	24.6
100	1.19	7.56
200	1.72	5.26
450	2.65	3.41
800	3.63	2.48
900	3.88	2.33
1000	4.12	2.19
1500	5.18	1.74
1800	5.75	1.57
2000	6.11	1.48
2500	6.95	1.30
3000	7.76	1.16
<ul style="list-style-type: none"> 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 cable, recommended temperatures are:

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

Meet the IEC requirements according to:

IEC 60754-1、IEC60754-2

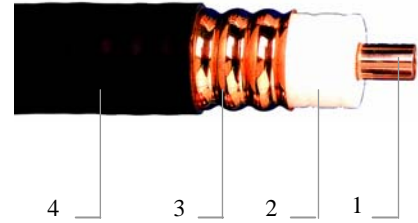
IEC 60332-1、IEC 60332-3.C、IEC 61034

Product Specification

PART NO.	3111001/3111002	ISSUE NO.	2
DATE OF ISSUE	5-3-2007	PAGE	3 of 4

1-1/4" low loss physical foamed insulation coaxial cable RF 50 1-1/4"

Description	TYPE No.	PART NO.
Standard cable	RF50114	3111001
Fire retardant cable	RF50114 Z	3111002
Construction		
Inner Conductor	Material	Smooth copper tube
	Diameter, mm	13.10±0.10
Insulation	Material	Physically foamed PE
	Diameter, mm	32.80±0.40
Outer conductor	Material	Ring corrugated copper
	Diameter, mm	35.80±0.30
Jacket	Material	PE or fire retardant PE
	Diameter, mm	38.80±0.30
Mechanical properties		
Bending radius, mm	Single	200
	Repeated	380
	Moving	-
Pulling strength, N		5900
Crush resistance, kg/mm		2.2
Recommended temperature, °C	Store	-70~+85
	Installation	-40~+60
	Operation	-55~+85
Electrical properties		
Impedance, Ω		50±1
Capacitance, PF/m		75
Propagation velocity, %		89
DC breakdown voltage, kV		9.0
Insulation resistance, MΩ •km		>5×10 ³
Peak power, kW		205
Screening attenuation, dB		>>120
Cut-off frequency, GHz		3.3



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

Figure 3: RF50 1-1/4" coaxial cable

Attenuation and average power		
Frequency MHz	Nom. attenuation @20°C, dB/100m	Power rate @20°C, kW
10	0.253	38.6
100	0.832	11.7
200	1.20	8.12
450	1.87	5.22
800	2.59	3.78
900	2.77	3.53
1000	2.94	3.32
1500	3.73	2.62
1800	4.16	2.35
2000	4.43	2.21
2500	5.08	1.92
3000	5.68	1.72
● 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 cable, recommended temperatures are:

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

Meet the IEC requirements according to:

IEC 60754-1、IEC60754-2

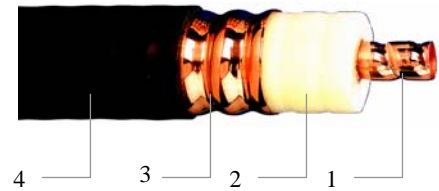
IEC 60332-1、IEC 60332-3.C、IEC 61034

Specifications



PART NO.	3111201/3111202	ISSUE NO.	2
DATE OF ISSUE	5-3-2007	PAGE	4 of 4

1-5/8" low loss physical foamed insulation coaxial cable RF 50 1-5/8"



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

Figure 4:RF50 1-5/8" coaxial cable

Description	TYPE No.	PART NO.
Standard cable	RF50158	3111201
Fire retardant cable	RF50158 Z	3111202
Construction		
Inner Conductor	Material	Helically corrugated copper
	Diameter, mm	17.30±0.10
Insulation	Material	Physically foamed PE
	Diameter, mm	43.50±0.60
Outer conductor	Material	Ring corrugated copper
	Diameter, mm	46.50±0.30
Jacket	Material	PE or fire retardant PE
	Diameter, mm	49.50±0.40
Mechanical properties		
Bending radius, mm	Single	300
	Repeated	510
	Moving	--
Pulling strength, N		3630
Crush resistance, kg/mm		2.1
Recommended temperature, °C	Store	-70~+85
	Installation	-40~+60
	Operation	-55~+85
Electrical properties		
Impedance, Ω		50±1
Capacitance, PF/m		76
Propagation velocity, %		88
DC breakdown voltage, kV		11
Insulation resistance, M Ω ·km		>5×10 ³
Peak power, kW		315
Screening attenuation, dB		>>120
Cut-off frequency, GHz		2.5

Attenuation and average power

Frequency MHz	Nom. attenuation @20°C, dB/100m	Power rate @20°C, kW
10	0.202	54.3
100	0.671	16.4
150	0.834	13.2
200	0.976	11.3
300	1.22	9.01
450	1.53	7.18
800	2.13	5.15
900	2.29	4.81
1000	2.43	4.52
1500	3.11	3.54
1800	3.47	3.17
2000	3.71	2.96
2500	4.27	2.58

- 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 cable, recommended temperatures are:

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

Meet the IEC requirements according to:

IEC 60754-1、IEC60754-2

IEC 60332-1、IEC 60332-3.C、IEC 61034

