RFSMR300

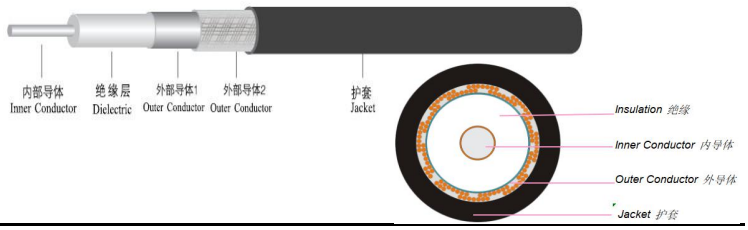
高性能低损耗射频电缆

Ver A1 发布日期 2015年3月

P/N:4604

产品特点

- 84%Vp FPE介质+自粘铝箔+镀锡铜丝编织
- 超低损耗，低成本，超长寿命
- 等同于 LMR300
- 可替换 CDF300
  CNT300



结构尺寸

	结构	尺寸（mm)	公差	材料
1	中心导体	1.78	±0.02	裸铜
2	电介质	4.83	±0.15	发泡PE
3	外导体	5.00	±0.01	自粘铝箔
4	外层屏蔽	5.80	±0.15	镀锡铜丝编织
5	外护套	7.62	±0.15	PE黑色或定制

机械与环境性能

弯曲半径，最小安装(mm)	22.2
弯曲半径，重复弯曲(mm)	76.2
最大拉伸强度(N)	570
重量(g/m)	80 max.
温度范围，安装与使用(°C)	-40~+85
电力抗破碎性(700N)(%)	< 1%

有毒有害物质含量

镉及其化合物 (Cd)	< 0.01%
铅及其化合物 (Pb)	< 0.1%
汞及化合物 (Hg)	< 0.1%
六价铬及其化合物	< 0.1%
多溴联苯(PBB)	< 0.1%
多溴二本醚(PBDE)	< 0.1%

电气性能

特性阻抗(ohm)	50 + 2-1	绝缘介电强度(V DC)	2000
静电容(pF/m)	80	绝缘电阻(MΩ · km)	> 10,000
传输速率(%)	84	额定功率(KW)	10
内直流电阻(ohm/km)	< 11.5	屏蔽性能(dB)	> 90
外直流电阻(ohm/km)	< 12	编织密度(%)	75±3
护套火花电压(V RMS)	5000	驻波比 30-6000 MHz	⩽1.25

衰减值（典型值@25°C&VSWR=1.0）与传输功率值（典型值@40°C&一个标准大气压下）

频率 MHz	30	50	150	220	450	900	1500	1800	2000	2500	5800
dB/100 m	3.85	4.70	8.00	9.80	13.80	19.90	26.00	28.70	30.30	34.20	54.20
平均功率 kW	2.090	1.620	0.920	0.760	0.520	0.360	0.280	0.250	0.240	0.210	0.130

衰减最大高出10%

Defined by：Luke
Prepared by: Eric
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Rev: A/0

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RFSMR300

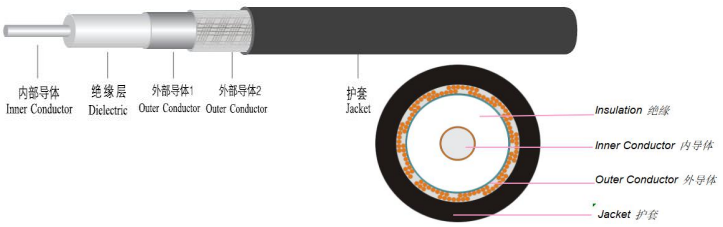
Ultra Low Loss Coax Cable

Ver A1 Release Date Match, 2015

P/N:4604

Features&Benefits

- 84%Vp FPE+Al Bonded Tape+TC shield
- Ultra-low loss, Less cost,Durable
- Equivalent to LMR300
- Replace to CDF300
  CNT300



Construction Specification

	Description	Size（mm）	Tol.	Materials
1	Center conductor	1.78	±0.02	Bare Copper
2	Dielectric	4.83	±0.15	Foam PE
3	Outer conductor	5.00	±0.05	Bonded AL/P-Foil
4	Outer sheild	5.80	±0.15	Tinned Copper Shields
5	Jacket	7.62	±0.15	PE black or customize

Mechanical&Environmental Specifications

Bend Radious:installation (mm)	22.2
Bend Radious:repeated (mm)	76.2
Max.Pulling Tension (N)	570
Weight (g/m)	80 max.
Temp, Operating&Installation (ºC)	-40~+85
Crush resistance of cable (load of 700N)(%)	＜1%

RoHS Guideline

Cadmium content (Cd)	＜0.01%
Lead content (Pb)	＜0.1%
Mercury content (Hg)	＜0.1%
Chromium (VI) content	＜0.1%
Polybrominated Biphenyls (PBB)	＜0.1%
Polybrominated Diphenyl Ether (PBDE)	＜0.1%

Electrical Specifications

Characteristic Impedance(ohm)	50＋2-1	Dielectric Strength(V DC)	2000
Capacitance(pF/m)	80	Insulation resistance(MΩ·km)	＞10,000
Velocity ratio(%)	84	Peak Power(KW)	10
DCR: Inner Conductor(ohm/km)	＜11.5	Shielding Effectiveness(dB)	＞90
DCR: Outer Conductor(ohm/km)	＜12	Shields Coverage(%)	75±3
Jacket Sparker(V RMS)	5000	SWR 30-2500 MHz	≤1.25

Attenuation（Typical@25ºC&VSWR=1.0）&Power（VSWR=1.0;40ºC;Sea Level）

Frequency MHz	30	50	150	220	450	900	1500	1800	2000	2500	5800
dB/100 m	3.85	4.70	8.00	9.80	13.80	19.90	26.00	28.70	30.30	34.20	54.20
Avg.Power kW	2.090	1.620	0.920	0.760	0.520	0.360	0.280	0.250	0.240	0.210	0.130

Maximum attenuation is 10% higher.

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