RFSMU500

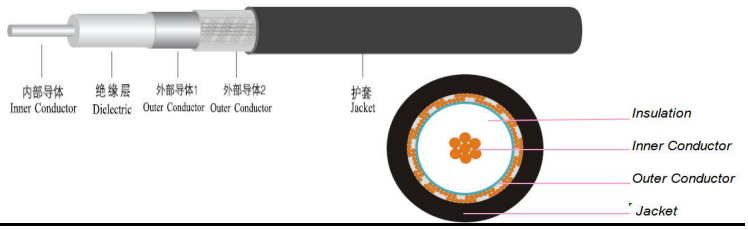
高性能低损耗,超柔射频电缆

Ver A/0 发布日期 2015年3月

P/N:1456

产品特点

- 85%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 LMR500UF
- 可替换 CDF500UF
  CNT500UF



结构尺寸

	结构	尺寸（mm）	公差	材料
1	中心导体	3.61(1.203mm*7)	±0.01	绞线裸铜
2	电介质	9.40	±0.15	发泡PE
3	外导体	9.55	±0.005	自粘铝箔
4	外层屏蔽	10.29	±0.05	镀锡铜丝编织
5	外护套	12.70	±0.15	TPE黑色或定制

机械与环境性能

弯曲半径，最小安装(mm)	31.8
弯曲半径，重复弯曲(mm)	127
最大拉伸强度(N)	1156
重量(g/m)	100
温度范围，安装与使用(°C)	-40~+85
电缆抗压(负载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	绝缘介电强度(V DC)	2500
静电容(pF/m)	78	绝缘电阻(MΩ · km)	> 10,000
传输速率(%)	82	额定功率(KW)	22
内直流电阻(ohm/km)	< 2.21	屏蔽性能(dB)	> 90
外直流电阻(ohm/km)	< 4.2	编织密度(%)	90±3
护套火花电压(V RMS)	8000	驻波比 30-2500 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	2.10	2.70	4.80	5.90	8.50	12.30	16.30	18.00	19.10	21.60	34.90
平均功率 kW	3.680	2.840	1.610	1.320	0.910	0.630	0.480	0.430	0.410	0.360	0.220

衰减最大高出10%

Defined by：Luke
Prepared by: Eric
Approved by：K.F. Lu
Rev: A/0

深圳市睿凡讯连科技有限公司
网址：www.rfcoms.com
电话：+86 13480725660
Email：luke@rfcoms.com

RFSMU500

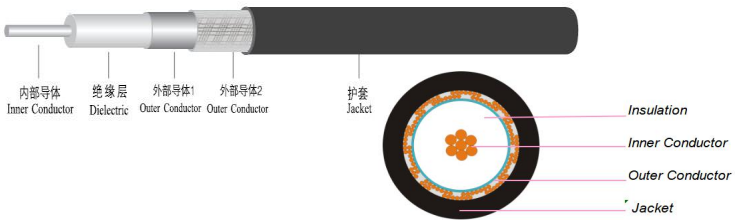
High performance,Ultra Low Loss,Ultra flexible Coax Cable

Ver A/0 Release Date Match, 2015

P/N:1456

Features&Benefits

- 85%Vp FPE+Al Bonded Tape+TC shield
- Ultra-low loss, Less cost,Durable
- Equivalent to LMR500UF
- Replace to CDF500UF
  CNT500UF



Construction Specification

	Description	Size（mm）	Tol.	Materials
1	Center conductor	3.61(1.203mm*7)	±0.02	Bare Copper
2	Dielectric	2.95	±0.15	Foam PE
3	Outer conductor	9.55	±0.05	Bonded AL/P-Foil
4	Outer sheild	10.29	±0.05	Alumunium Shields
5	Jacket	12.70	±0.15	PE black or customize

Mechanical&Environmental Specifications

Bend Radious:installation (mm)	31.8
Bend Radious:repeated (mm)	127
Max.Pulling Tension (N)	1156
Weight (g/m)	100
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	Dielectric Strength(V DC)	2500
Capacitance(pF/m)	78	Insulation resistance(MΩ·km)	＞10,000
Velocity ratio(%)	82	Peak Power(KW)	22
DCR: Inner Conductor(ohm/km)	＜2.21	Shielding Effectiveness(dB)	＞90
DCR: Outer Conductor(ohm/km)	＜4.2	Shields Coverage(%)	90±3
Jacket Sparker(V RMS)	8000	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	2.10	2.70	4.80	5.90	8.50	12.30	16.30	18.00	19.10	21.60	34.90
Avg.Power kW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Maximum attenuation is 10% higher.

Defined by：Luke

Prepared by: Eric

Approved by：K.F. Lu

Rev: A/0

Shenzhen RFcoms Technology Co.,LTD

Website：www.rfcoms.com

Tel：+86 13480725660

Email：luke@rfcoms.com