

产品型号 (Product model) : ML51  
 产品料号 (Part number) : 01.01.C006031

### 产品特点 (Product features):

1. 工作频率高 (High working frequency)
2. 测试寿命长 (Long test life)
4. 驻波及损耗低 (Standing wave and low loss)



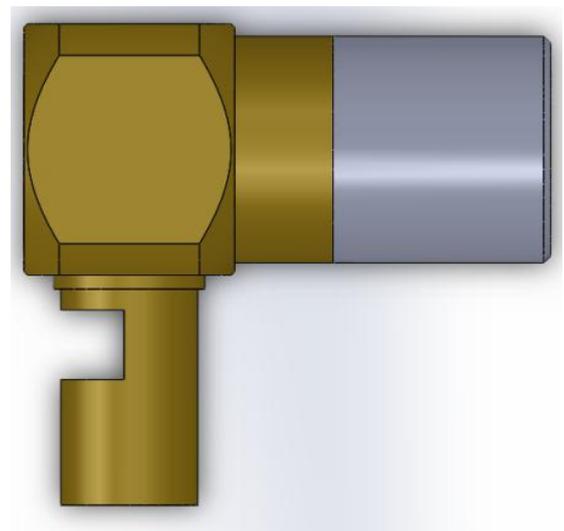
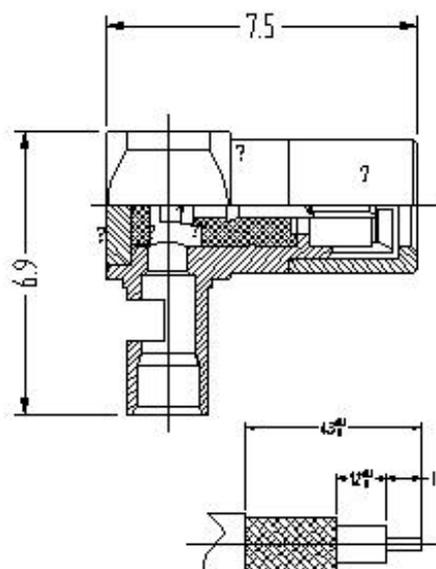
### 电气性能 (Electrical properties) :

技术指标 (Technical indicators)	参数 (Parameter)
频率 (Frequency Range)	DC-8.5Ghz
阻抗 (Impedance)	50Ω
插入损耗 (Insertion loss)	0.5dB@8.5GHz
驻波 (VSWR)	<1.25@0.1-6GHz <1.35@6-8.5GHz
工作电压 (Operating Voltage)	250Vrms
介质耐压 (Dielectric Strength)	750Vrms
绝缘电阻 (Insulation resistance)	≥5000MΩ
内导体接触电阻 (Inner conductor contact resistance)	≤3mΩ
外导体接触电阻 (Outer conductor contact resistance)	≤2mΩ

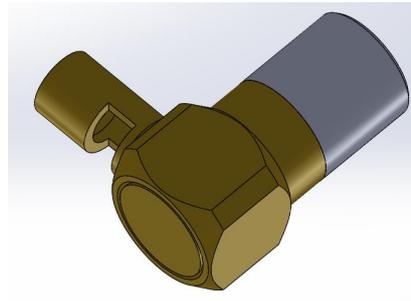
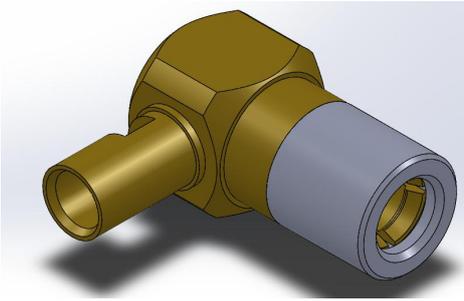
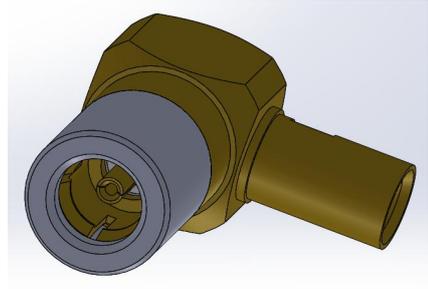
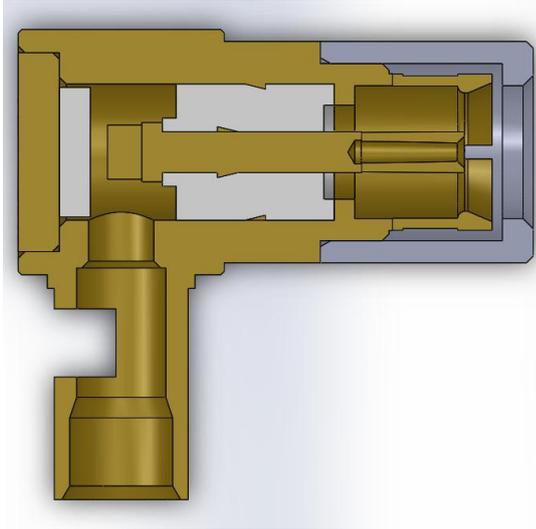
## 机械性能 (Mechanical properties) :

名称 (Name)	材质 (Texture of)	涂覆 (Coating)
内导体 (Inner conductor)	铍青铜 (17300)	金
外接触件 (Outer conductor)	铍青铜 (17300)	金
保护套管 (Protective casing)	不锈钢	钝化
壳体 (Case)	黄铜 (C3600)	金
绝缘体 (Insulator)	PTFE	N/A
温度范围 (Temperature range)	-55℃~+155℃	
寿命 (Service life)	≥500 次	
耐盐雾 (Salt spray resistance)	普金镀层产品, 5%浓度氯化钠盐水, 喷淋 48 小时后, 外观无明显锈蚀和斑点 (其他要求视电镀厚度而定)	

## 产品外观尺寸(Product appearance size):

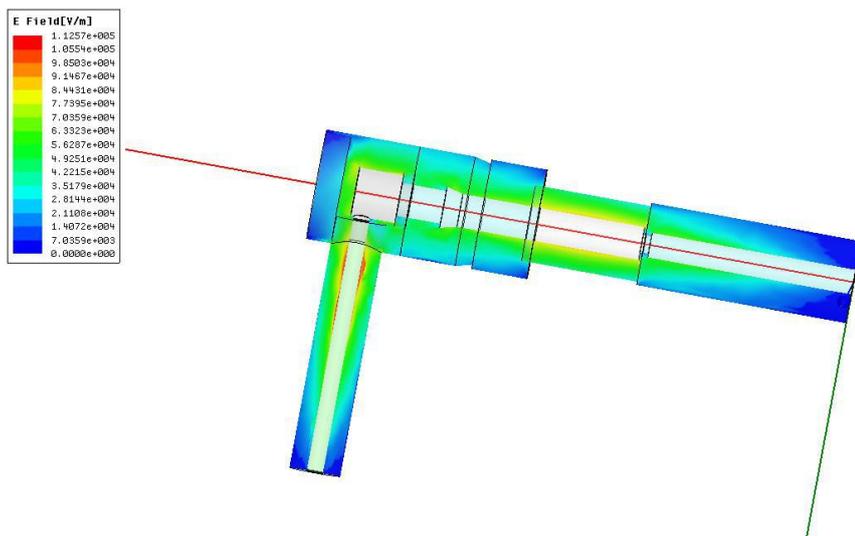


产品结构照片和图片(Product structure photos and pictures):

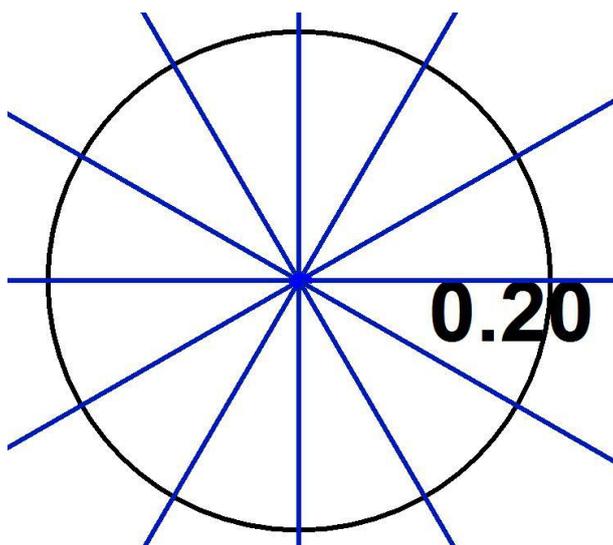


产品设计仿真效果(Product design simulation effect):

## 仿真波束不连续区域状态和分布

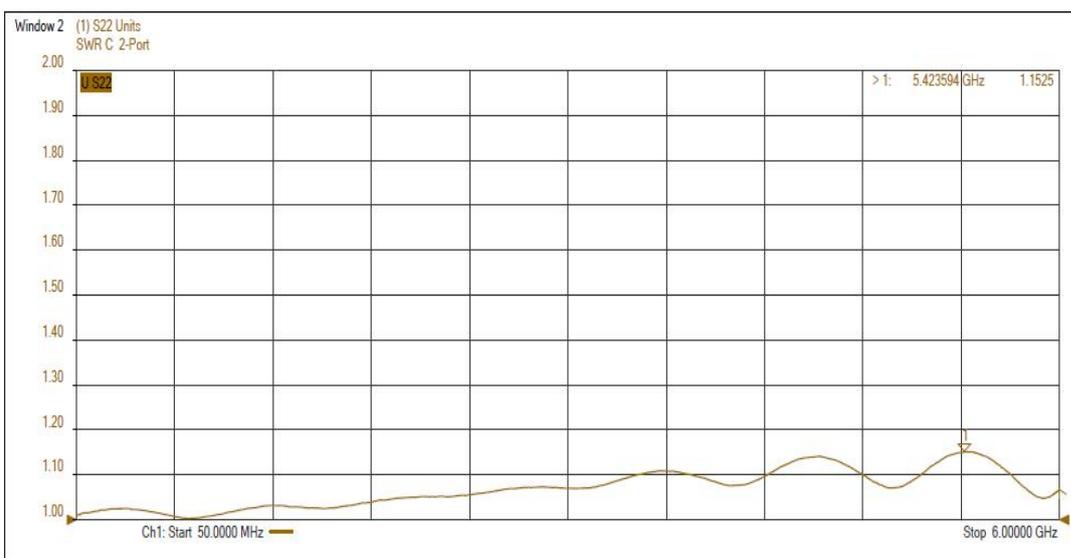
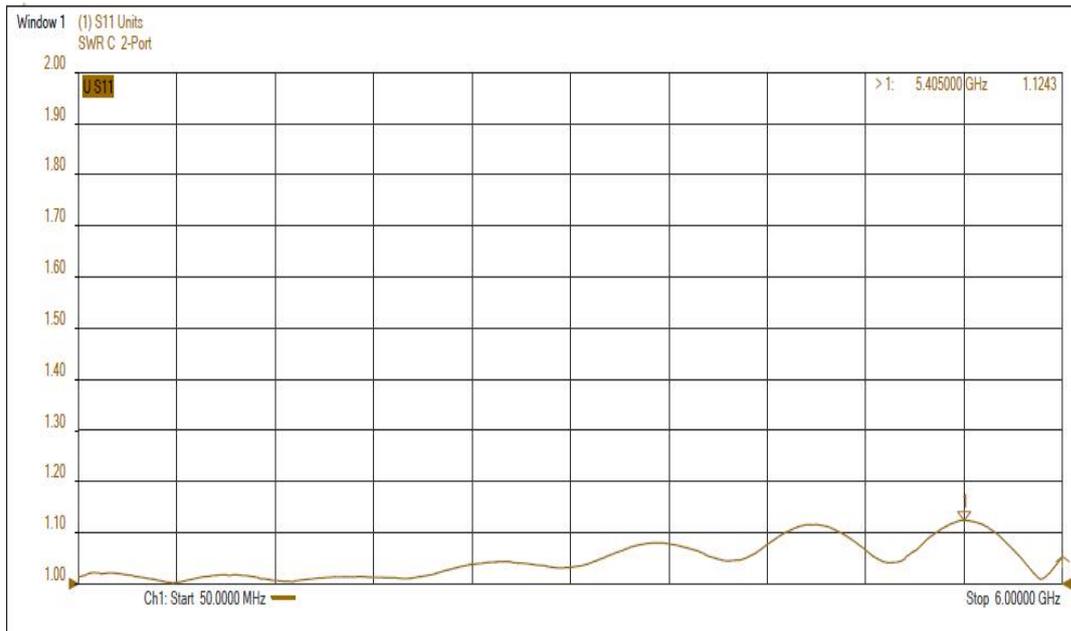


## 仿真极坐标发散线示意图



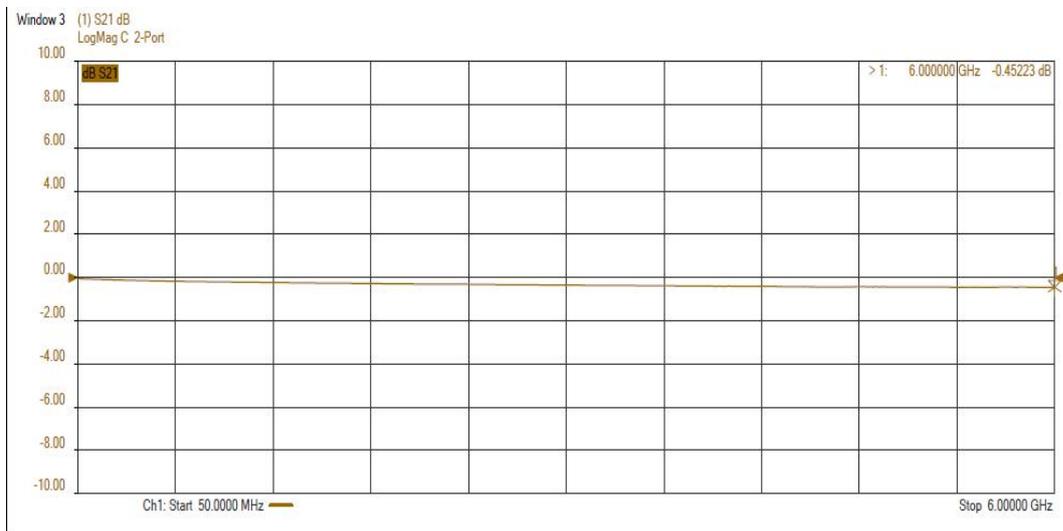
## 测试数据 (Test Data):

### 1 电压驻波比 (VSWR) 0-6GHz



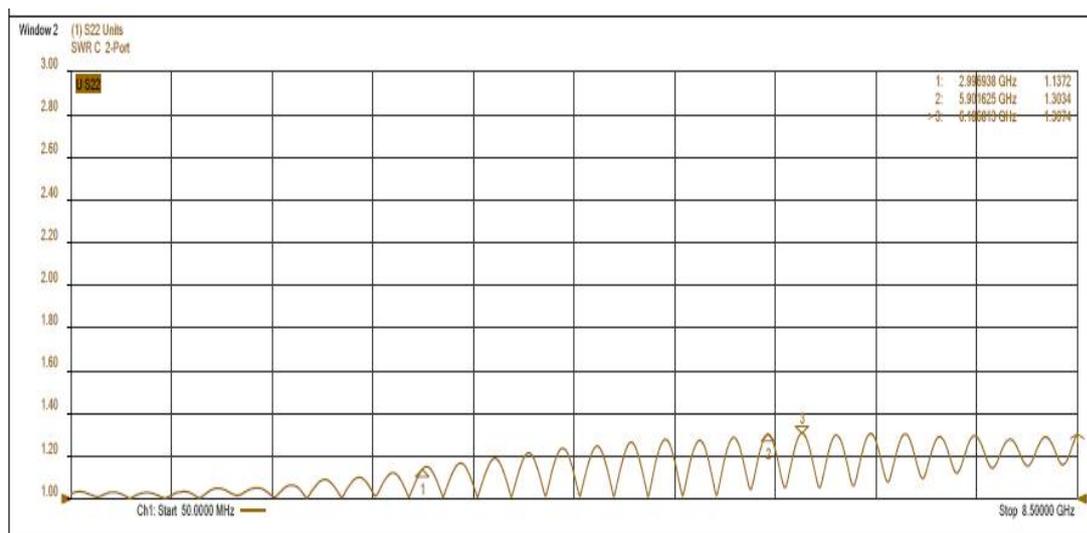
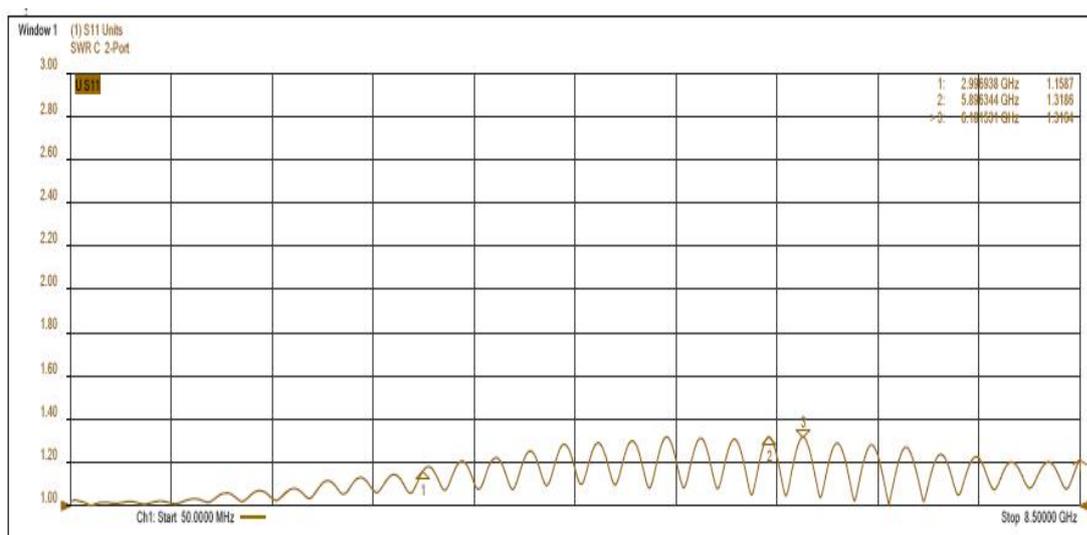
### 2 插入损耗 (IL) 0-6GHz

线长≈100mm, 线损=0.31dB, SMA设定损耗0.05dB, 转接器插入损耗≈0.045dB, < 设定值0.1225@6GHz



## 测试数据 (Test Data):

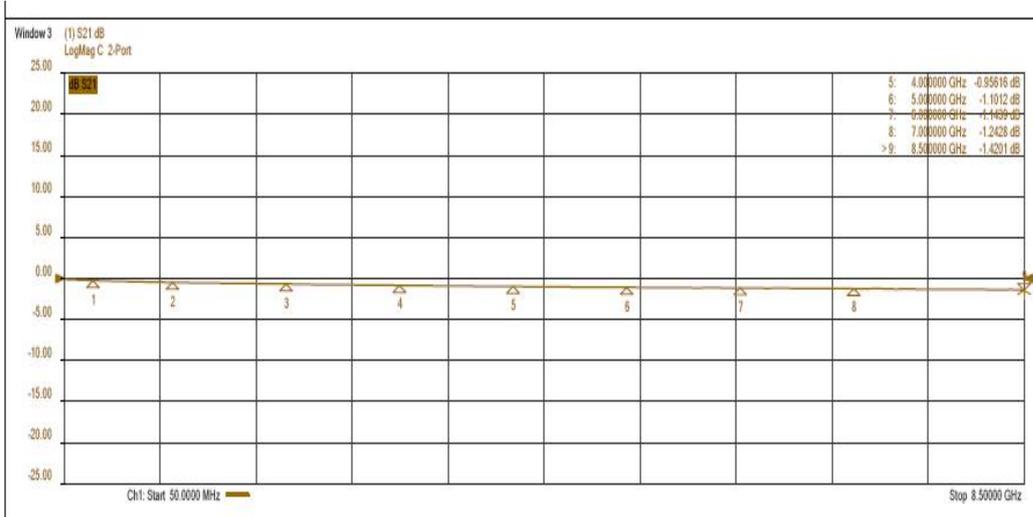
### 3 电压驻波比 (VSWR) 0-8.5GHz



50Ω DC-8.5GHz VSWR<1.35@8.5GH IL:0.5dB@8.5GHz

### 4 插入损耗 (IL) 0-8.5GHz

线长≈370mm, 线损=1.147dB, SMA设定损耗0.08dB, 转接器插损≈0.1156dB, <设定值0.1458@8.5GHz



### 5 常规性能指标汇总 (IL) 0-8.5GHz

Channel Settings								
Channel	Sweep Type	Points	Start (MHz)	Stop (GHz)	IF BW (kHz)	Sweep Time (s)	Pow 1 (dBm)	Pow 2 (dBm)
1	LinFreq	1601	50.000000	8.500000	10.000000	1.000000	0.000000	0.000000

Trace Attributes								
Window	ID	Trace	Channel	Correction	Options	Marker	Position	Response
1	1	S11	1	C 2-Port		1	2996.9375 MHz	1.1587
						2	5896.3438 MHz	1.3186
						3	6181.5313 MHz	1.3162
2	1	S22	1	C 2-Port		1	2996.9375 MHz	1.1371
						2	5901.625 MHz	1.3034
						3	6186.8125 MHz	1.3074
3	1	S21	1	C 2-Port		1	300 MHz	-0.25284 dB
						2	1000 MHz	-0.47318 dB
						3	2000 MHz	-0.67406 dB
						4	3000 MHz	-0.84273 dB
						5	4000 MHz	-0.96098 dB
						6	5000 MHz	-1.1022 dB
						7	6000 MHz	-1.1436 dB
						8	7000 MHz	-1.2445 dB
						9	8500 MHz	-1.4226 dB