



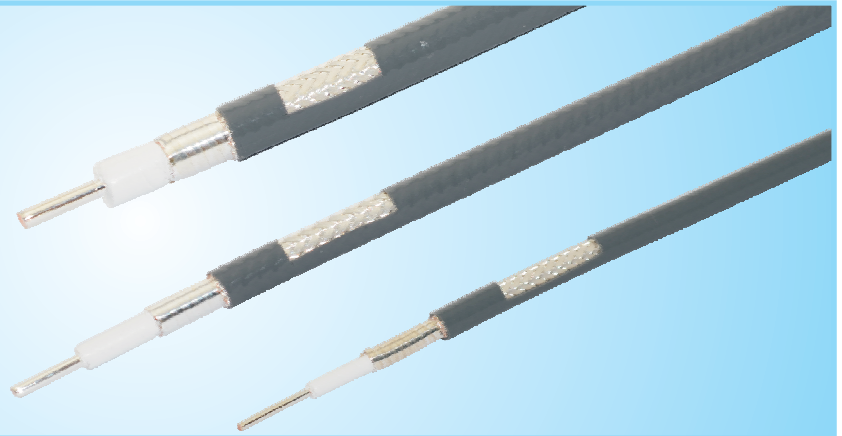
# JA 系列Series

## 超低损耗&稳幅稳相柔性同轴电缆

- \*Ultra Low Loss
- \*Phase & Amplitude Stable
- \*Flexible Coaxial Cable

### 电缆特点

- \*最高工作频率DC-40GHz
- \*温度稳相550PPM(@-55°C+85°C)
- \*机械稳相 $\pm 5^\circ$
- \*幅度稳定性 $\pm 0.1\text{dB}$
- \*超低损耗
- \*优良的屏蔽性能



### Features & Advantages

- \*Operating Frequency up to DC-40GHz
- \*Phase Stable  $< 550\text{PPM}@-55-+85^\circ\text{C}$
- \*Mechanical Phase Stable  $\pm 5^\circ$
- \*Amplitude Stable  $\pm 0.1\text{dB}$
- \*Ultra Low Loss
- \*Superior Shielding Effectiveness ( $< -90\text{dB}$ )

### 典型应用-Applications

- 相控阵雷达
- 航空电子
- 电子对抗
- 舰载弹载微波模块互连
- 任何要求低损耗、相位稳定的苛刻互连场合

### 产品介绍-Products Instruction

JA系列电缆采用了特殊的同轴设计和先进的生产工艺,使得电缆在全频段范围内有着优良的电气与机械性能指标。

电气性能方面,信号传输率高达83%,温度相位稳定性小于550PPM,同时还具有低损耗、屏蔽效率高、高功率等优点。

机械性能方面,低密度绝缘和铜带绕包,使得电缆有更优的弯曲性和优越的机械相位稳定性能。

环境使用方面,采用耐环境性能优质的原材料使其具有使用温度范围宽、抗腐蚀性、防潮防霉、阻燃等特点。

• Phased Arrays Radar



• Avionics



• EW



## 超低损耗&稳幅稳相柔性同轴电缆

Ultra Low Loss, Phase & Amplitude Stable, Flexible High Performance Coax

### 结构材料与尺寸 Material & Construction (可定制尺寸、材料、颜色等)

结构 Structure	材质 Material	JA360	JA500	JA800
1. 中心导体 (mm) Center Conductor (mm)	镀银铜 Silver Plated Copper	0.91	1.45	2.30
2. 介质 (mm) Dielectric (mm)	低密度PTFE LD PTFE	2.60	4.00	6.30
3. 外导体 (mm) Outer Conductor (mm)	镀银铜带 Silver Plated Copper Ribbon	2.66	4.20	6.60
4. 外屏蔽 (mm) Outer Shields (mm)	镀银铜丝 Silver Plated Copper	3.15	4.70	7.15
5. 护套 (mm) Jacket (mm)	FEP 灰色/Gray, 薄荷绿/Mint Green	3.60	5.10	7.80

### 主要参数指标 Specifications

主要参数指标 Specifications	JE220	JE280	JE400
工作频率 Operating Frequency Range (GHz)	67	40	40
特性阻抗 Impedance ( $\Omega$ )	50	50	50
传输速率 Vp (%)	76	76	76
介质耐压 Voltage Withstand (V, DC)	500	2000	3000
屏蔽效率 Shielding Effectiveness (dB)	<-90	<-90	>-100
静态弯曲半径 Bend Radius: Installation (mm)	11	14	19
动态弯曲半径 Bend Radius: Repeated (mm)	22	28	38
重量 Weight (g/m)	18	22	48
工作温度范围 Operating Temperature Range ( $^{\circ}\text{C}$ )	-55~125	-55~125	-55~85
温度相位 Stable Phase (PPM)	500	500	450

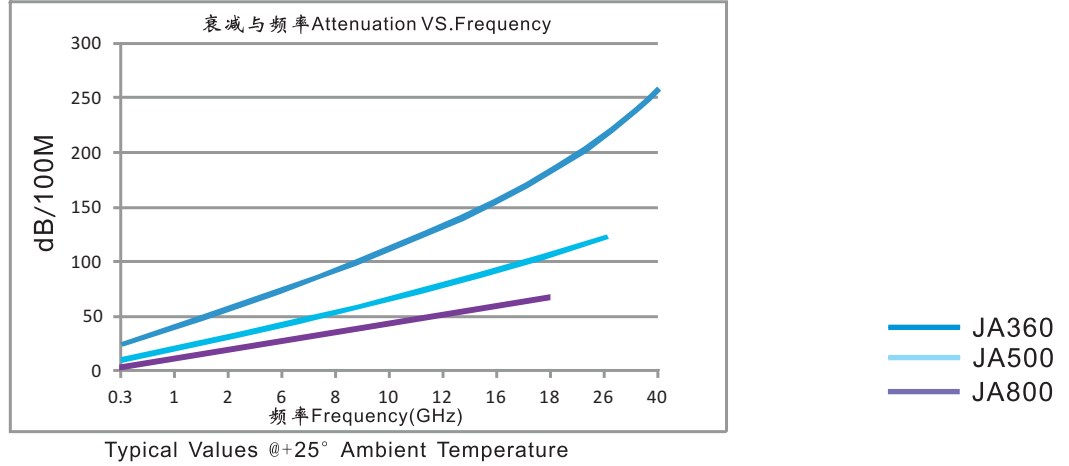


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## 衰减与频率变化曲线图 Attenuation VS. Frequency

电缆衰减/Cable Attenuation 典型值@ +25° 环境温度



## 衰减与频率 Attenuation vs. Frequency (dB/100m)

频率 (Mhz) Frequency	300	1000	2000	6000	8000	10000	12000	16000	18000	26500	40000
JA360	20.4	37.5	55.36	93.8	108.9	122.3	134.6	156.6	166.7	204.8	255.7
JA500	12.5	23	32.7	57.4	66.6	74.8	82.3	95.8	101.9	125.2	
JA800	7.3	14.8	21.1	37.3	43.4	48.9	53.9	63	67.1		

JA360—K1=1.16847 K2=0.00055

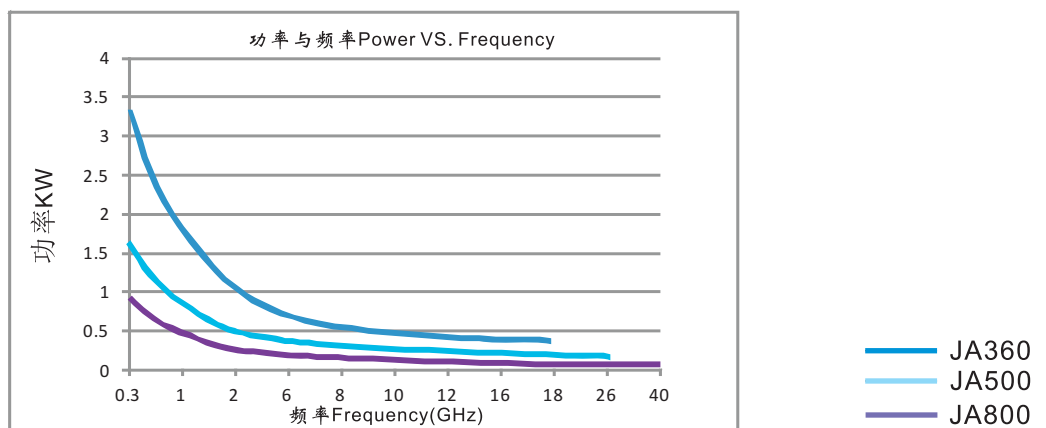
JA500—K1=0.715687 K2=0.000328

JA800—K1=0.45638 K2=0.000328

其他任意频点衰减=K1\*sqrt(fMHz)+K2\*fMHz; dB/100m

## 平均功率与频率变化曲线图 CW Power VS. Frequency

功率定义/Power Handling: 最大值@ +40° C的环境温度和海平面



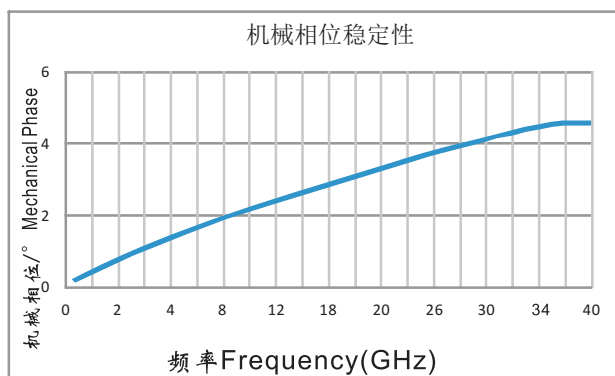
## 平均功率与频率 (kw) CW Power Handling VS. Frequency

频率 (Mhz) Frequency	300	1000	2000	6000	8000	10000	12000	16000	18000	26500	40000
JA360	0.94	0.511	0.359	0.204	0.176	0.157	0.142	0.122	0.115	0.094	0.075
JA500	1.608	0.875	0.615	0.351	0.302	0.268	0.244	0.211	0.197	0.163	
JA800	3.341	1.812	1.269	0.716	0.615	0.547	0.496	0.425	0.398		

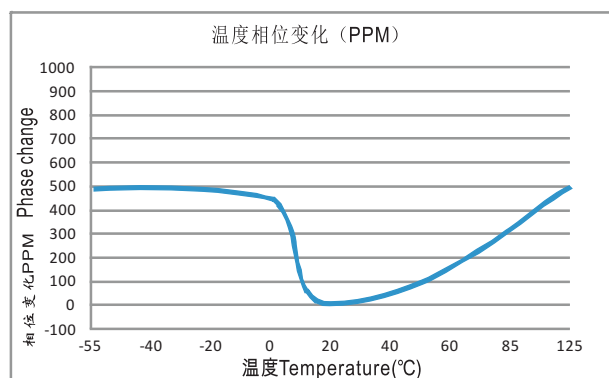
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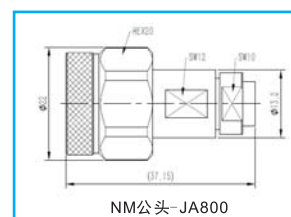
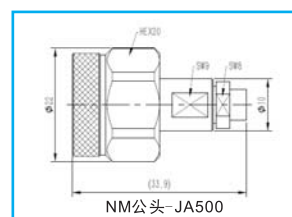
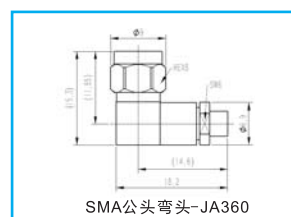
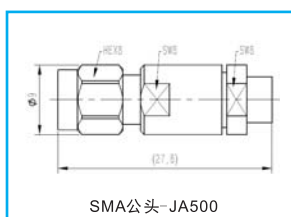
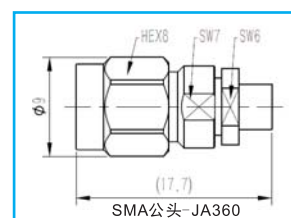
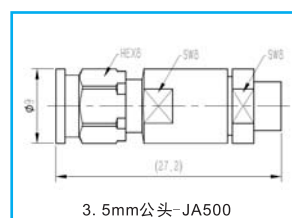
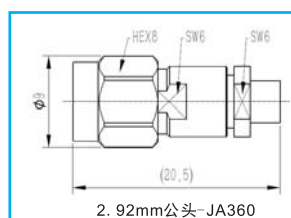
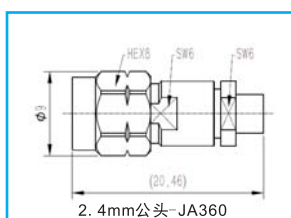
\*机械相位  
\*Mechanical Phase Stability



\*温度相位变化 (PPM)  
\*Phase Change vs. Temperature



## 部分连接器尺寸图 Connector Outline Drawing



## 适配连接器 Cable Connector Type

连接器 Connector	型号 Type	材料 Material	装接方式 Assembly Type	适用电缆 Applicable to cable
SMA	SMA-XXX	不锈钢SUS-303	焊接/Welding	JA360/JA500/JA800
N	N-XXX	不锈钢SUS-303	焊接/Welding	JA360/JA500/JA800
3.5mm	35-XXX	不锈钢SUS-303	焊接/Welding	JA500
2.92mm	29-XXX	不锈钢SUS-303	焊接/Welding	JA360
2.4mm	24-XXX	不锈钢SUS-303	焊接/Welding	JA360

备注Remark:  
XXX表示电缆型号; xxx Refer to Cable Type  
其余形式连接器(如TNC、BNC、SMP等)可定制 Other Type Connector also Available



Reel Cable



Cable Assembly