

# DB951 产品样本

DB951 是采用网状钍钨阴极、铜丝焊接鼠笼型栅极、水冷阳极和同轴型电极结构的金属陶瓷三极管，最大输出功率 60kW，最高工作频率 100MHz，适宜作射频振荡和放大，可与 RS3040CJ 互换使用。



## 1 基本特性

### 1. 1 阴极特性

加热方式	直热式
加热电压 (U <sub>f</sub> , AC 或 DC)	8V
加热电流 (I <sub>f</sub> )	约 185A

### 1. 2 静态特性

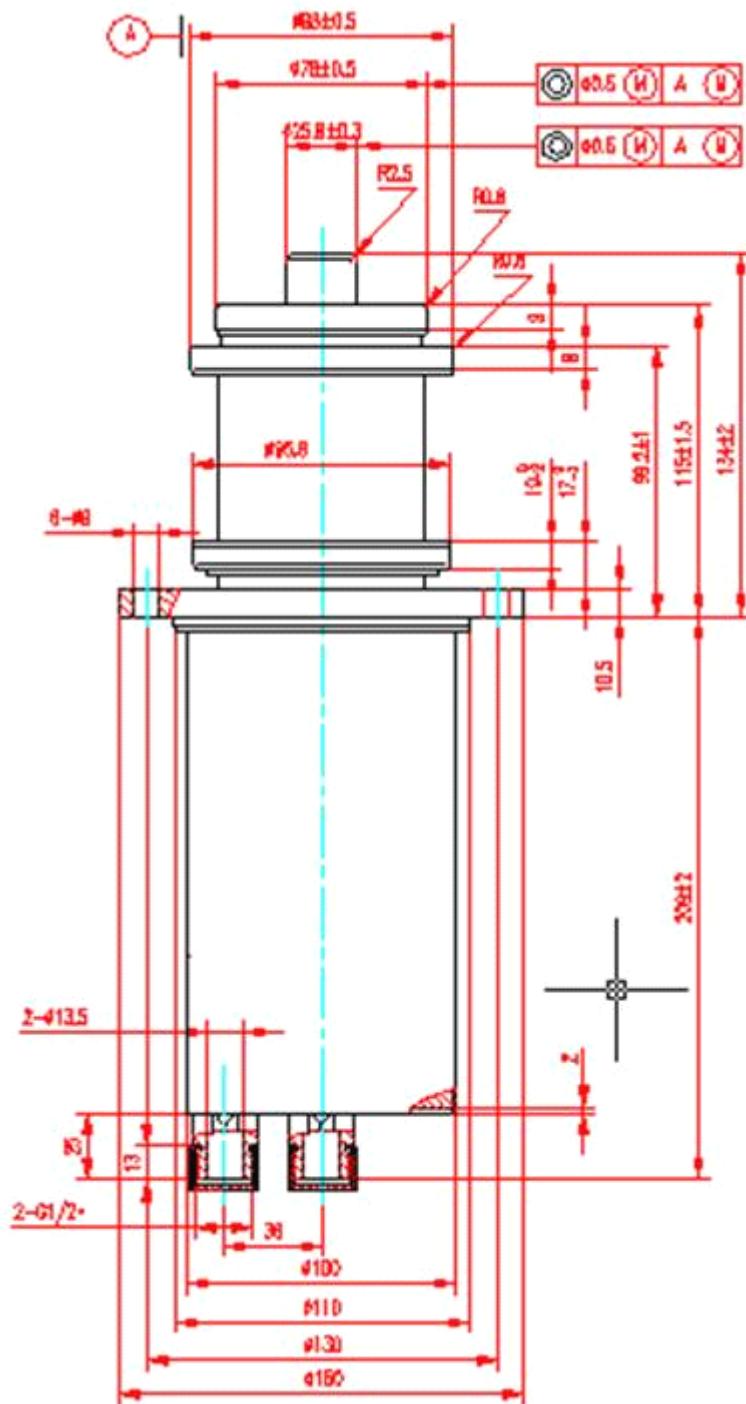
阴极发射电流 (U <sub>a</sub> =U <sub>g</sub> =500V)	48A
放大系数 (U <sub>a</sub> =7 to 10kV, I <sub>a</sub> =3.5A)	20
跨导 (U <sub>a</sub> =10kV, I <sub>a</sub> =3A)	80mA/V
阴极与栅极间电容	78pF
阴极与阳极间电容	2pF
栅极与阳极间电容	29pF

## 2 额定最大值

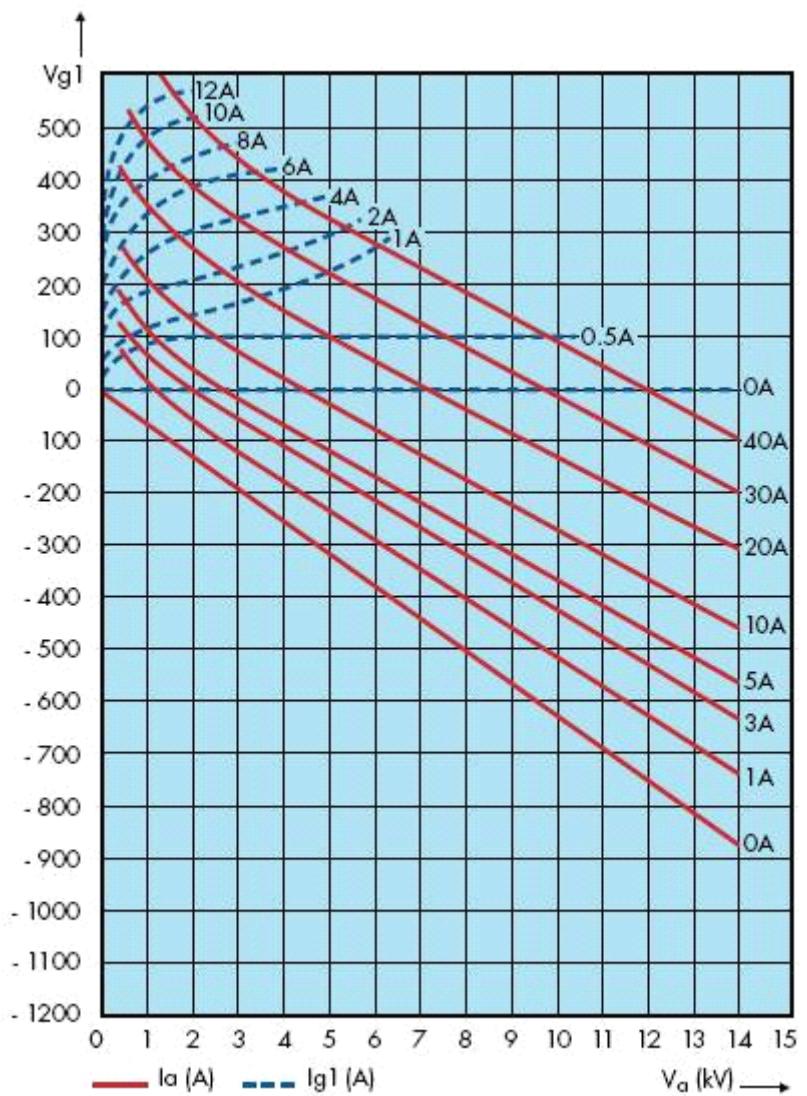
频率	f	100	MHz
阳极直流电压	U <sub>a</sub>	14	kV
栅极直流电压	U <sub>g</sub>	-1500	V
阴极直流电流	I <sub>k</sub>	12	A
峰值阴极电流	I <sub>km</sub>	45	A

阳极耗散功率	$P_a$	35	kW
栅极耗散功率	$P_g$	820	W
输出功率	$P_{out}$	60	kW

### 3 产品外形图



#### 4 恒流特性曲线



## **DB951 TRIODE**

The Xuguang's DB951 could be used instead of the RS3040.

### 1 General Characteristics

#### 1.1 Cathode Characteristics

Heating	Direct
Heating voltage ( $U_f$ )	8 V
Heating current ( $I_f$ )	Appr.185A

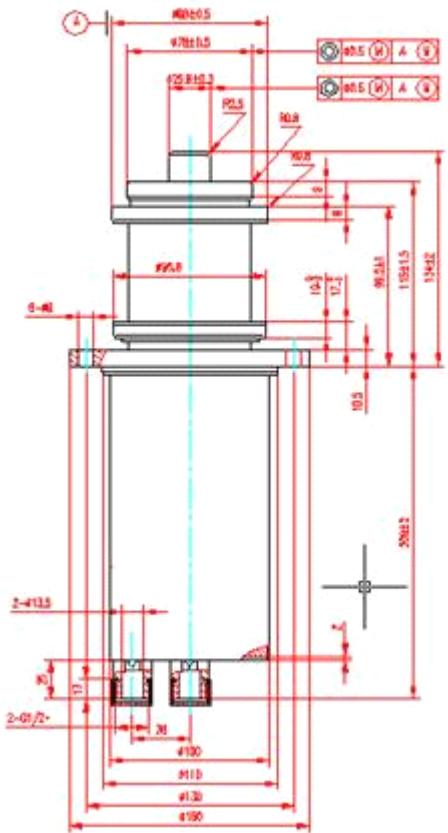
#### 1.2 Feature Characteristics

Cathode Emission Current ( $U_a=U_g=500V$ )	48A
Internal Amplification Factor ( $U_a=7$ to $10kV$ , $I_a=3.5A$ )	20
Transconductance ( $U_a=10kV$ , $I_a =3A$ )	80mA/V
Grid-cathode capacitance	78pF
Cathode-anode capacitance	2pF
Grid-anode capacitance	29pF

### 2 Maximum Ratings

Frequency	f	100	MHz
Anode DC Voltage	$U_a$	14	kV
Grid DC Voltage	$U_g$	-1500	V
Cathode DC Current	$I_k$	12	A
Peak Cathode Current	$I_{km}$	45	A
Anode Dissipation	$P_a$	35	kW
Grid Dissipation	$P_g$	820	W
Output Power	$P_{out}$	60	kW

### 3 Product Outline Drawing



## 4 Constant current characteristics

