

FD003Z (1445) 产品样本

FD003Z 型电子管系大功率金属陶瓷四极管，采用网状钍钨阴极，阳极采用蒸发冷却方式，阳极最大耗散功率达100kW。在频率达30MHz的短波发射机中，输出功率100—200kW。



1 基本特性

1.1 阴极特性

阴极	钍钨
加热方式	直热式
灯丝电压	10V
灯丝电流	300A

1.2 静态特性

阴极发射电流 ($U_a=U_{g1}=U_{g2}=500V$)	80A
内放大系数 ($U_a=3kV, U_{g2}=1000 \text{ to } 1500V, I_a=10A$)	5.75
跨导 ($U_a=3kV, U_{g2}=1500V, I_a=20 \text{ to } 25A$)	135mA/V

阴极接地时：

输入电容	450pF
输出电容	50pF
旁路电容	2.3pF

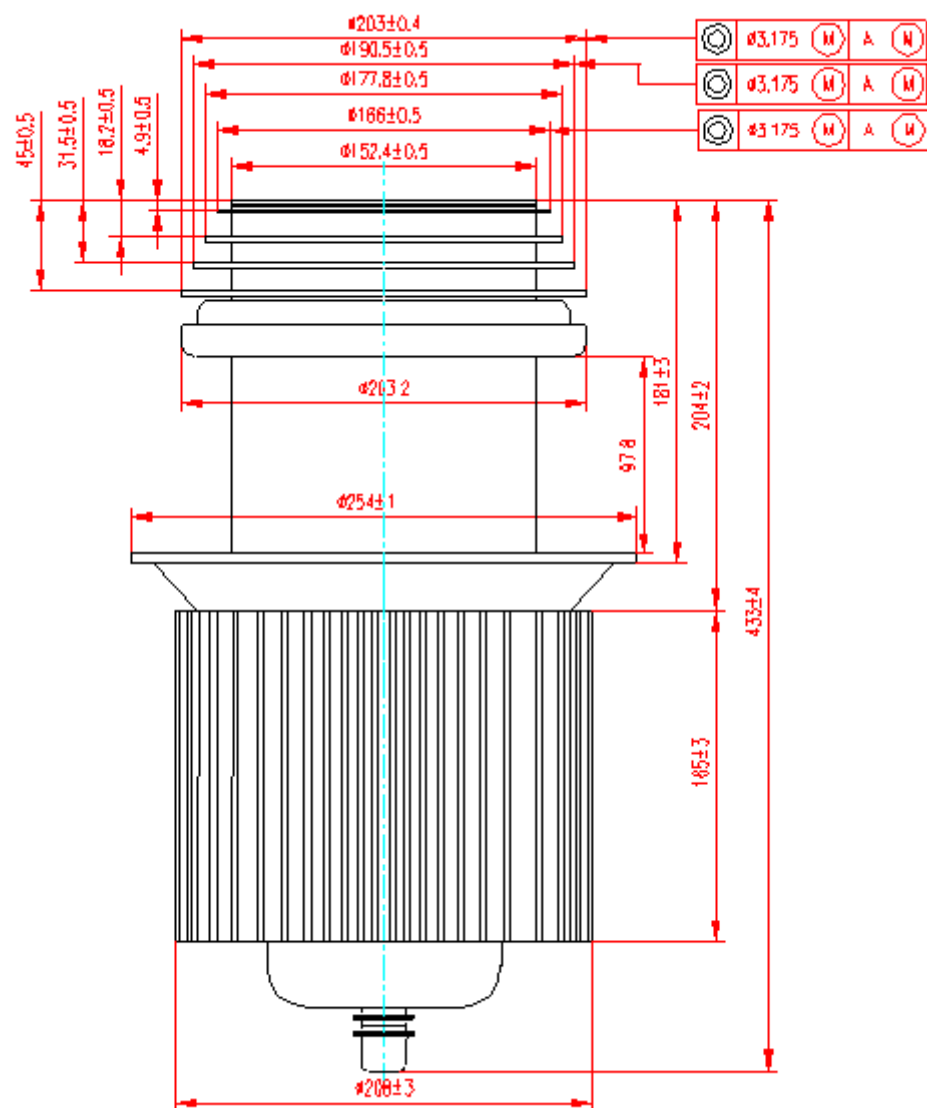
2 最大额定值

频率	f	30	MHz
阳极直流电压	U _a	20	kV
帘栅极直流电压	U _{g2}	2500	V
控制栅极直流电压	U _{g1}	—1050	V
阳极直流电流	I _a	15	A
阳极耗散功率	P _a	100	kW
控制栅极耗散功率	P _{g1}	500	W
帘栅极耗散功率	P _{g2}	1750	W

3 典型应用

频率	f	≤30	MHz
阳极直流电压	U _a	16	kV
帘栅极直流电压	U _{g2}	750	V
控制栅极直流电压	U _{g1}	—700	V
阳极电流	I _a	12	A
输出功率	P _{out}	138.5	kW

4 产品外形图



FD003Z TETRODE

The Xuguang's FD003Z could be used instead of the 4CV100000C.

1 General Characteristics

1. 1 Cathode Characteristics

Heating	Direct
Heater Voltage (U_f , AC 或 DC)	10V
Heater Current (I_f)	Appr.300A

1. 2 Feature Characteristics

Cathode Emission Current ($U_a=U_{g1}=U_{g2}=500V$)	80A
Internal Amplification Factor ($U_a=3kV$, $U_{g2}=1000$ to $1500V$, $I_a=10A$)	5.75
Transconductance ($U_a=3kV$, $U_{g2}=1500V$, $I_a=20$ to $25A$)	135mA/V

Capacitances(cathode earthed)

Input	450pF
Output	50pF
Transfer	2.3pF

2 Maximum Ratings

Frequency	f	30	MHz
Anode DC Voltage	U_a	20	kV
Screen-grid DC Voltage	U_{g2}	2500	V
Control-grid DC Voltage	U_{g1}	—1050	V
Cathode DC Current	I_k	15	A
Anode Dissipation	P_a	100	kW
Control-grid Dissipation	P_{g1}	500	W
Screen-gird Dissipation	P_{g2}	1750	W

3 Typical Application

Frequency	f	≤ 30	MHz
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Anode DC Voltage	U_a	16	kV
Screen-grid DC Voltage	U_{g2}	750	V
Control-grid DC Voltage	U_{g1}	—700	V
Anode Current	I_a	12	A
Output Power	P	138.5	kW

4 Product Outline Drawing

