

# FU616C 产品样本

FU616C 是采用网状钨钨阴极、钨丝焊接鼠笼栅极、超蒸发水冷阳极和同轴型电极结构的金属陶瓷四极管，在频率达 30 MHz 的短波和中波发射机中，输出功率 105kW，在 100kW 的 PDM 发射机中作开关管用，可与 RS2054SK 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 ( $U_f$ , AC 或 DC )	15V
加热电流 ( $I_f$ )	约 180A

### 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 ( $U_a=4kV$ , $U_{g2}=800$ to $1200V$ $I_A=5A$ )	4.5
跨导 ( $U_A=4kV$ , $U_{g2}=1000V$ 调 $U_{g1}$ 使 $I_A=5$ to $4A$ )	65mA/V
极间电容 (约):	
阴极与控制栅	170pF
阴极与帘栅	16pF
阴极与阳极	0.5pF
控制栅与帘栅	300pF
控制栅与阳极	3.0pF
帘栅与阳极	70pF

## 2 最大额定值

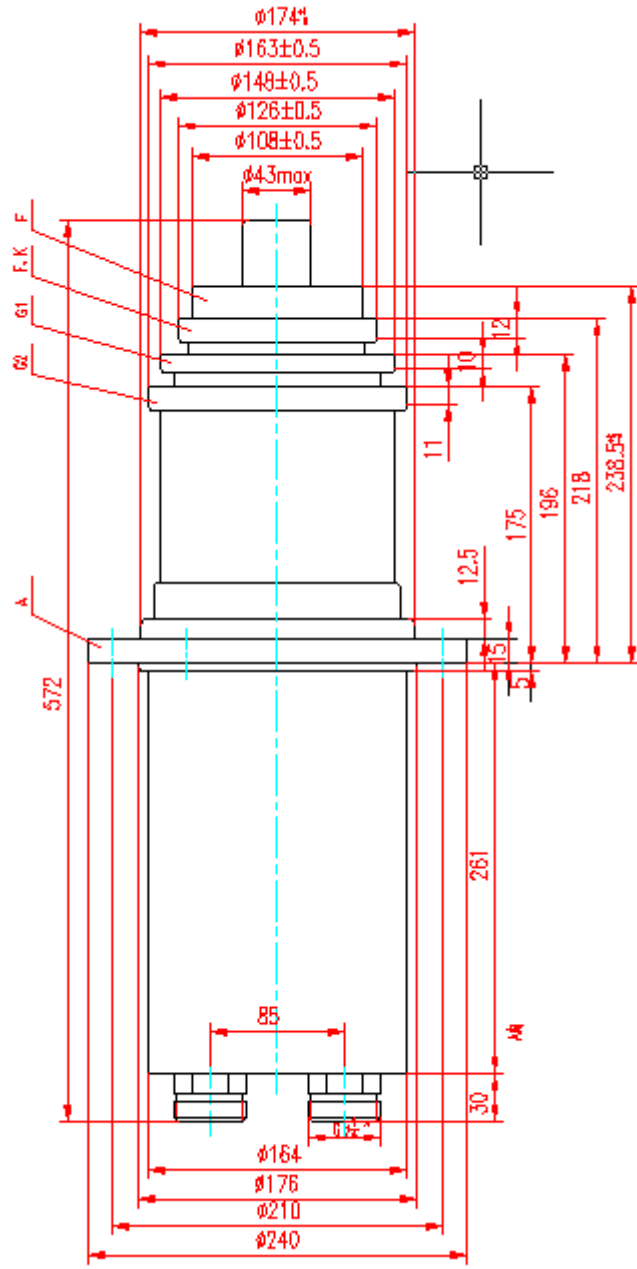
频率	f	30	MHz
阳极直流电压	$U_a$	15	kV
直流阴极电流	$I_k$	20	A
控制栅极直流电压	$U_{g1}$	-1000	V
帘栅极直流电压	$U_{g2}$	1600	V
阳极耗散功率	$P_a$	120	kW
控制栅极耗散功率	$P_{g1}$	1000	W
帘栅极耗散功率	$P_{g2}$	3000	W

## 3 典型应用

### C 类载波状态

频率	f	$\leq 30$	MHz
载波输出功率	P	105	kW
阳极电压	$U_a$	11.2	kV
控制栅偏压	$U_{g1}$	-250	V
帘栅电压	$U_{g2}$	800	V
阳极电流	$I_a$	10.8	A
控制栅电流	$I_{g1}$	1.1	A
帘栅电流	$I_{g2}$	1.0	A

## 4 产品外形图



# FU616C AM TETRODE

Output power In MW and SW transmitter with frequency of 30MHz:105kW. Switching tube in PDM transmitters with 100kW. The Xuguang'S FU616C could be used instead of the RS2054SK.

## 1 General Characteristics

### 1.1 Cathode Characteristics

Heating	Direct
Heater voltage ( $U_f$ , AC orDC)	15V
Heater current ( $I_f$ )	Appr..180A

### 1.2 Feature Characteristics

Cathode emission current ( $U_A=U_{G1}=U_{G2}=500V$ )	80A
Internal amplification factor ( $U_A=4kV$ , $U_{g2}=800$ to $1200V$ $I_A=5A$ )	4.5
Transconductance ( $U_A=4kV$ , $U_{g2}=1000V$ Adj. $U_{g1}$ for $I_A=5$ to $4A$ )	65mA/V
Interelectrode capacitances, Appr.:	
Cathode-control grid	170pF
Cathode-screen grid	16pF
Cathode-anode	0.5pF
Control grid-screen grid	300pF
Control grid-anode	3.0pF
Screen grid-anode	70pF

## 2 Maximum Ratings

Frequency	$f$	30	MHz
Anode DC voltage	$U_a$	15	kV
Cathode DC current	$I_k$	20	A
Control-grid DC voltage	$U_{g1}$	-1000	V
Screen-grid DC voltage	$U_{g2}$	1600	V
Anode dissipation	$P_a$	120	kW
Control-grid dissipation	$P_{g1}$	1000	W

Screen-grid dissipation	$P_{g2}$	3000	W
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### 3 Typical Application

Class C carrier condition

Frequency	f	$\leq 30$	MHz
Carrier output power	P	105	kW
Anode voltage	$U_a$	11.2	kV
Control grid voltage	$U_{g1}$	-250	V
Screen-grid voltage	$U_{g2}$	800	V
Anode current	$I_a$	10.8	A
Control-grid current	$I_{g1}$	1.1	A
Screen-grid current	$I_{g2}$	1.0	A

### 4 Product Outline Drawing

