



The FU7085F is a ceramic-metal triode. It has thoriated tungsten cathode and forced air cooling of plate.

The tube maximum plate dissipation is 2.5kW (Intermittent) and maximum frequency operation is 110MHz.

The tube is designed for oscillator in the industry high frequency heating applications.

The tube can replace 7T85RB.

### GENERAL CHARACTERISTICS

#### Electrical

Cathode.....	Thoriated Tungsten
Filament Voltage.....	6.3V
Filament Current.....	31~38A
Transconductance.....	5mA/V
Amplification Factor.....	21
Interelectrode Capacitances:	
Filament to Grid.....	15pF
Filament to Plate.....	0.5pF
Grid to Plate.....	13pF

#### Mechanical

Overall Length.....	221mm
Overall Diameter.....	φ130mm
Net Weight.....	2.5kg
Mounting Position.....	Vertical, Plate Up or Down

### COOLING

Cooling.....	Forced Air
Air Flow.....	≥3.3m <sup>3</sup> /min
Static Pressure Loss.....	≥170Pa
Maximum Envelope Temperature.....	250℃



### MAXIMUM RATINGS

	Contin- uous	Interm- ittent	
Frequency.....	110	110	MHz
Filament Startup Current.	52.5	52.5	A
Plate Voltage.....	8	8.5	kV
Plate Current.....	1.0	1.2	A
Grid Current.....	300	350	mA
Plate Dissipation.....	2.5	2.5	kW
Grid Dissipation.....	130	150	W

### TYPICAL OPERATION

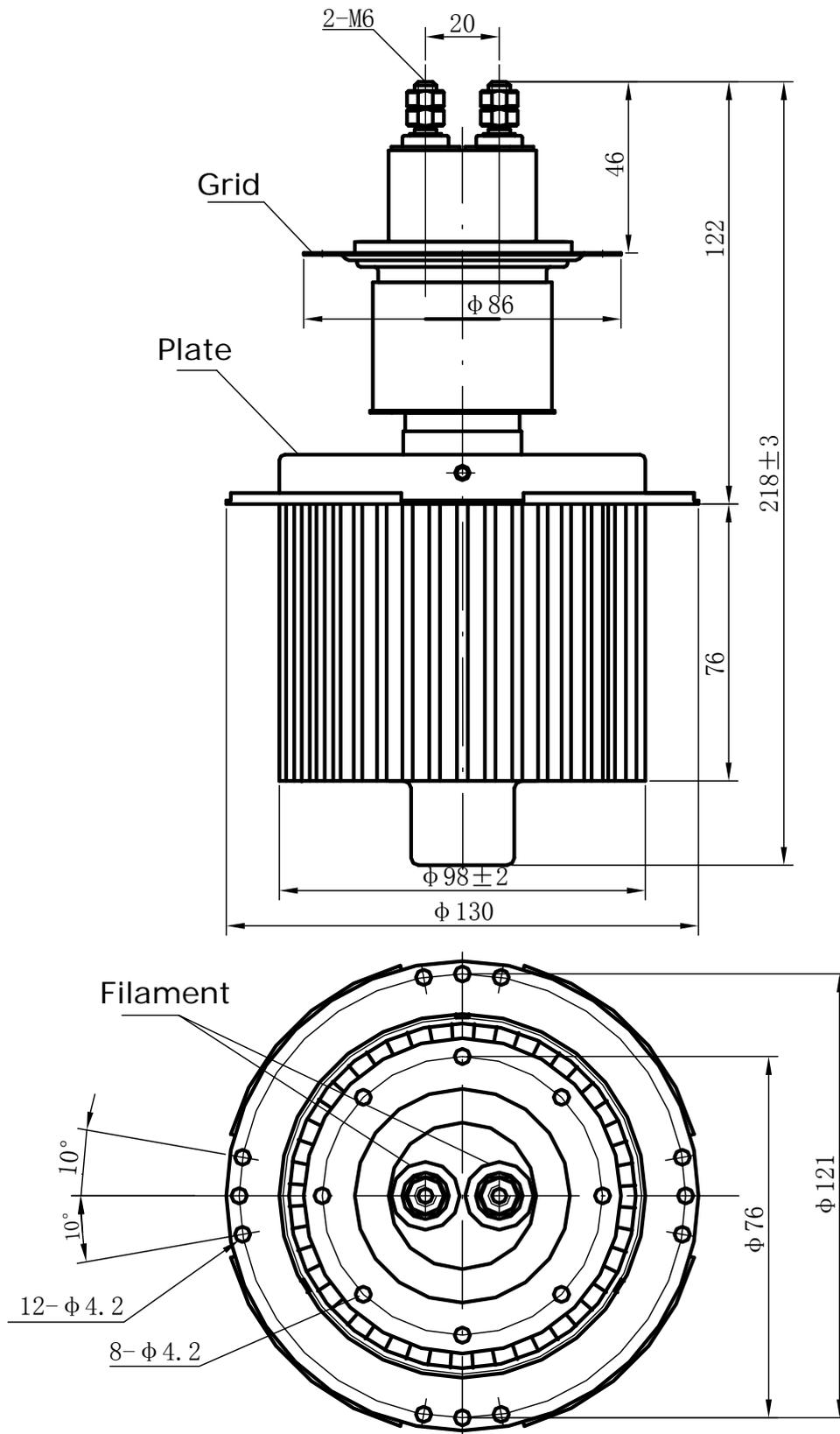
	Contin- uous	Interm- ittent	
Plate Voltage.....	7.5	8	kV
Plate Current.....	0.9	1.0	A
Grid Current.....	200	250	mA
Grid Resistor.....	4500	4500	Ω
Output Power.....	5.1	6	kW

#### Note :

Values for intermittent service are those for 30 seconds of operating time and 50% of duty Factor.

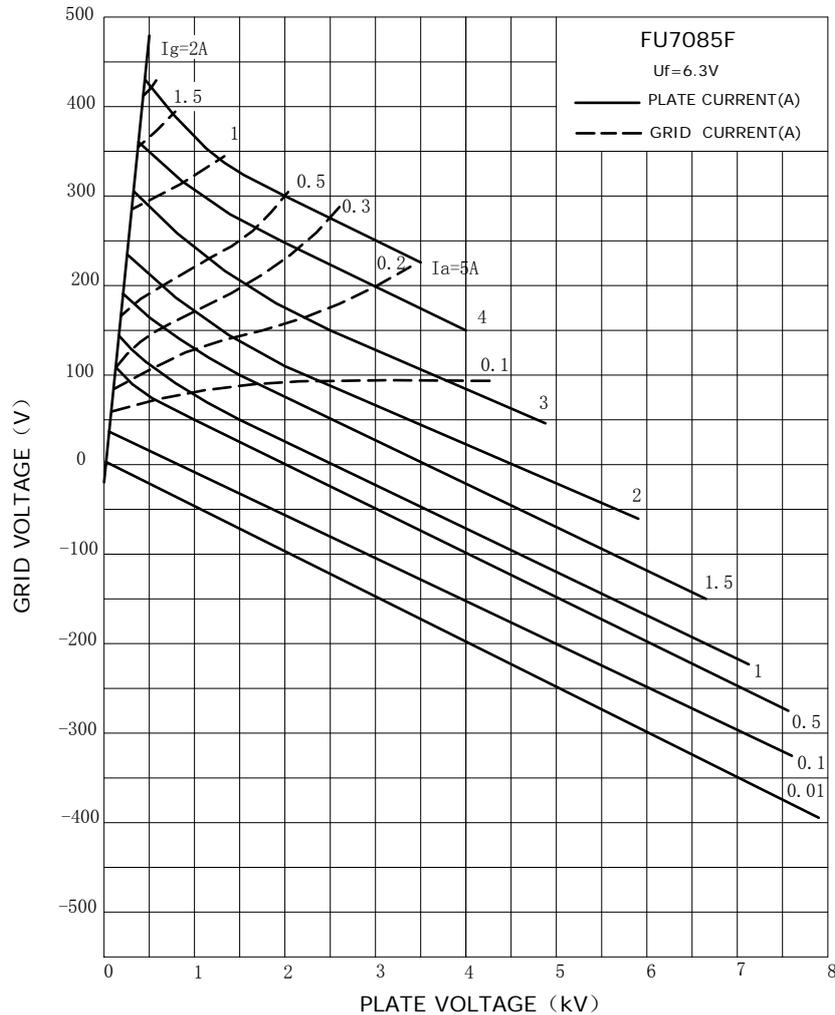


**OUTLINE**





**TYPICAL CONSTANT CURRENT CHARACTERISTICS**



**NOTES:**

1. When the tube is to be transported, pack it taking the original packing method. Any other method may damage the tube.
2. When the tube arrives at the destination, use mega-ohm meter to check the insulating property and whether the filament is damaged or not. It should inform the manufacturer if the abnormal situation happened.
3. The tube must be handled with care when carrying. When loading unloading the tube, must be very careful and avoids crashing and knocking to prevent the filament to break.
4. Confirm that the tube is mounted correctly. Check the operation of the safety devices such as the overload relay, water relay and air flow relay.
5. The cooling system must be opened before connect to the filament power, which could be closed after cutting off the filament power in 20 minutes.
6. When the tube works, the limit parameters using is allowed had to be less than one, and the one can't exceed the limit value.
7. When the tube is to be stored for a long time, pack it in the box and store the box in a location with less vibration.