

FORCED-AIR COOLED POWER TRIODE

7T70R is a ceramic to metal construction triode, intended for use as an industrial oscillator or amplifier.

Cooling is accomplished by air-forced and the anodes allow dissipation of 4.5 kW.

Maximum ratings apply at frequencies up to 110 MHz.

GENERAL DATA

Electrical

Filament : Thoriated Tungstenum			
Voltage (see note 1)	Vf	12.6	V
Current	If	35	A
Maximum starting current		100	A
Minimum heating time		60	S
(Time interval between the instant of application of filament voltage and plate voltage)			

Characteristics

Amplification factor		21	
at $V_a = 6$ to 8kV ; $I_a = 0,6\text{A}$			
Transconductance		10	mA/V
at $V_a = 8\text{kV}$; $I_a = 0,4$ A to $0,6\text{A}$			
Direct interelectrodes capacitances			
Grid to Anode		15	pF
Grid to Filament		20	pF
Anode to filament		0.6	pF

Mechanical

Dimensions

Maximum overall length	180	mm
Maximum diameter	128	mm

Net weight (approx.)	2.6	kg
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Mounting Position : vertical, anode down or up

Cooling : Forced-air cooling required (see note 2)

Minimum air flow	9	m ³ /min
Minimum static pressure	30	mm of water
Maximum incoming air temperature	45	°C
Maximum radiator temperature	150	°C
Maximum seal temperature	150	°C

Note 1 : Filament should never be operated at a voltage higher nor lower, by 5 % of rated filament voltage.

Note 2 : The specified air flow should be delivered before and during the application of filament voltage and should continue approximately 3 minutes after the removal of all tubes power.

RF POWER AMPLIFIER AND OSCILLATOR - CLASS C TELEGRAPHY

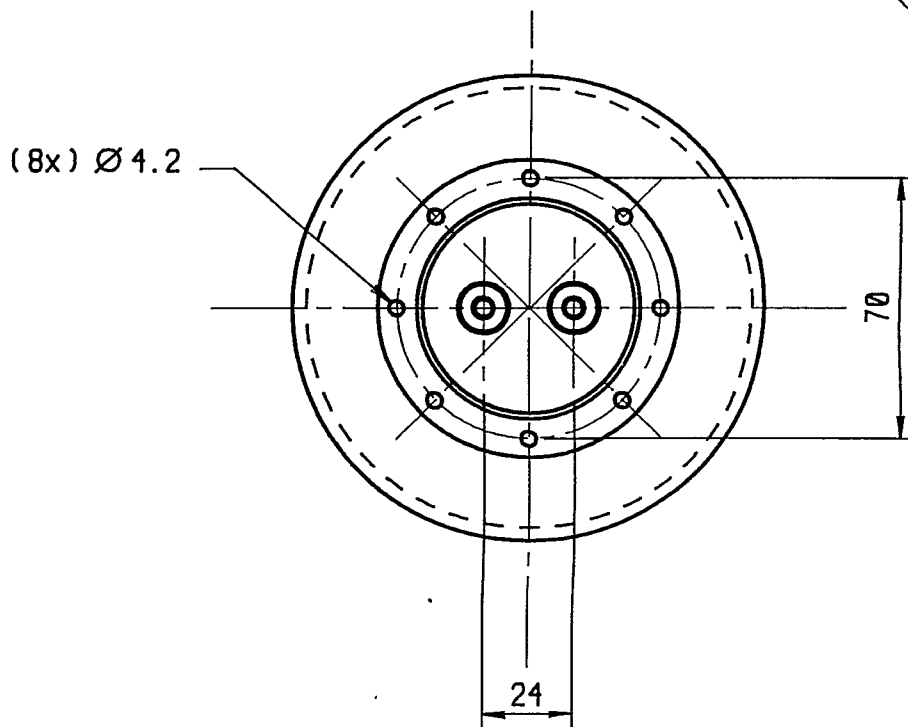
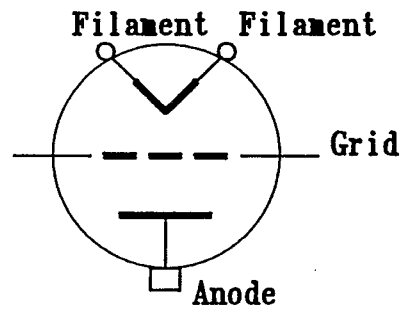
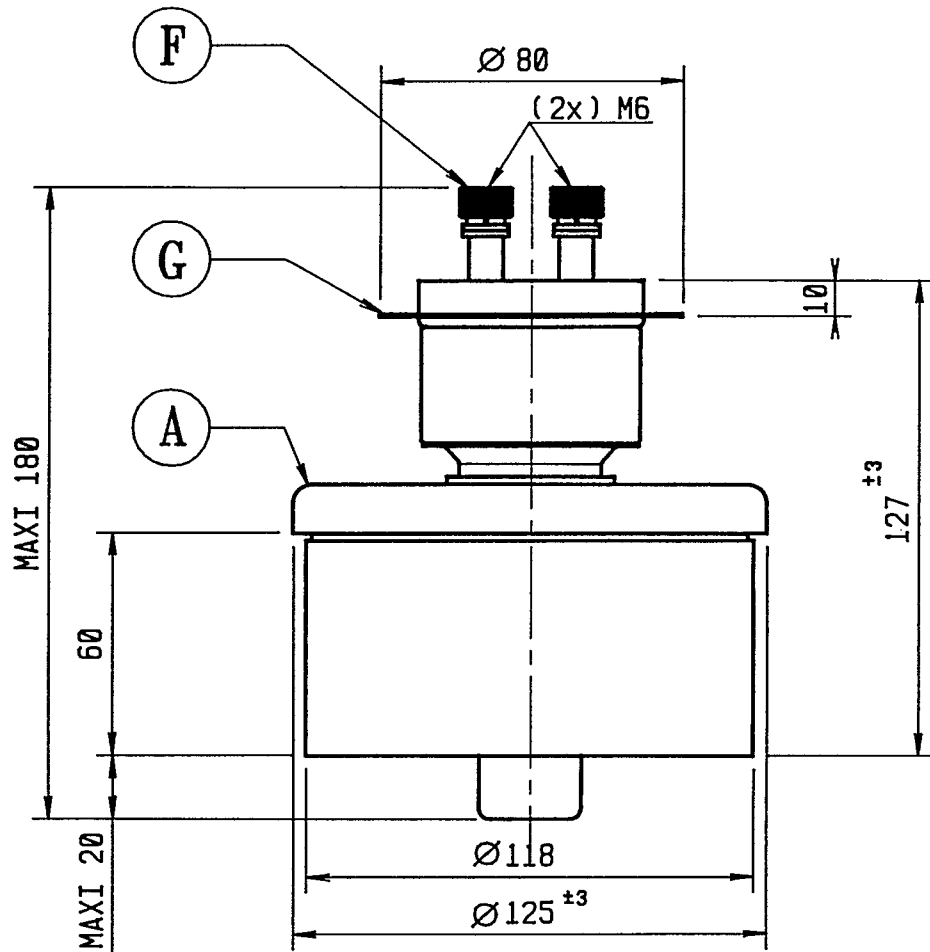
MAXIMUM RATINGS : Absolute values

Frequency for maximum ratings	Max	110	MHz
DC anode voltage		8 000	V
DC grid voltage	-	1 000	V
DC anode current		1.7	A
DC grid current		0.5	A
Anode Input power		13	kW
Anode dissipation		4.5	kW
Grid dissipation		150	W

TYPICAL OPERATION

DC anode voltage		7 000	V
DC grid voltage	-	600	V
Peak RF grid voltage		935	V
DC anode current		1.5	A
Driving power (approx.)		280	W
Power output (approx.)		7.9	kW

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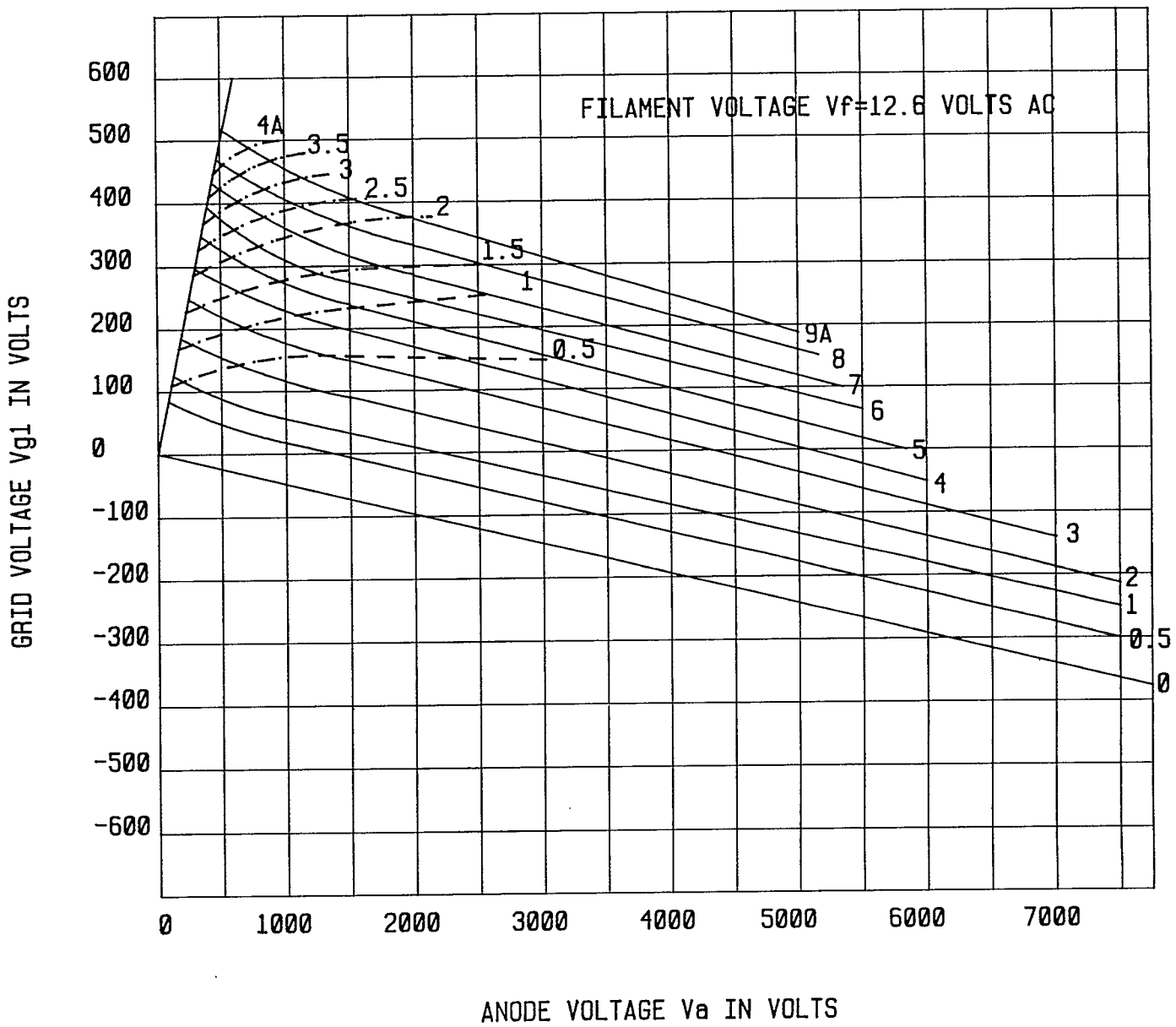


7T70R

(unit in mm)

CONSTANT CURRENT CHARACTERISTICS

Parameter anode current in Ampere —————
Parameter grid current in Ampere - - - - -



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