

**INDUSTRIAL
RF HEATING**

T380-1
Glass-metal triode

1.1 kW

- Output power :
1100 W in CW mode
- Anode voltage : 4 kV
- Anode dissipation : 380 W
- Frequencies up to 150 MHz
- Radiation cooled



THALES

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RF HEATING



T 380-1

The T 380-1 is a high-power triode designed specifically for industrial applications. This tube uses a coaxial design and glass-metal technology. It may be operated as an RF oscillator for industrial use in class C. For operation in pulse mode,

the parameters depends on each equipment characteristics, contact us for specific information.

This product is designed, developed and manufactured at an ISO 9002 registered production site.

Electrical characteristics

Cathode	thoriated tungsten
Heating	direct
Filament voltage (+ 5 %, - 10 %)	5 V
Filament current	15 A
Interelectrode capacitances :	
• grid-anode	7 pF
• grid-cathode	7.5 pF
• cathode-anode	0.1 pF
Amplification factor	28
Transconductance (Va : 4 kV, Ia : 190 mA)	8 mA/V

Mecanical characteristics

Operating position	vertical
Weight	250 g approx.
Dimensions	see outline drawing

Cooling

Cooling method	radiation / low velocity air flow
Temperature of the bulb	300 °C max.
Temperature of the glass-metal seals :	
• top (anode connection)	220 °C max.
• bottom (grid and cathode connections)	180 °C max.

Maximum ratings

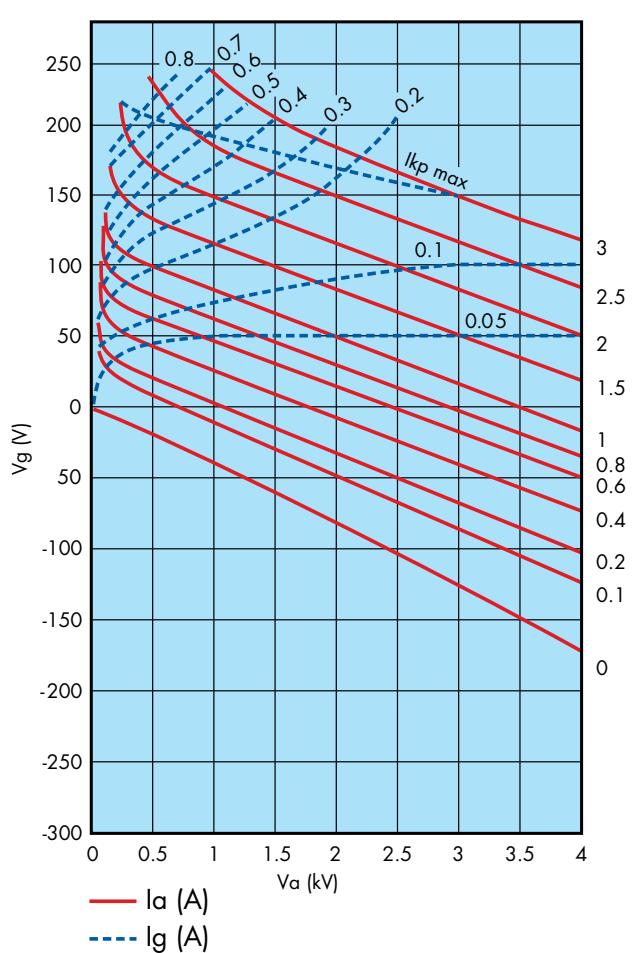
Frequency	150 MHz
Anode voltage	4 kV
Peak cathode current	3 A
Anode dissipation	380 W
Grid dissipation	40 W

Typical operation

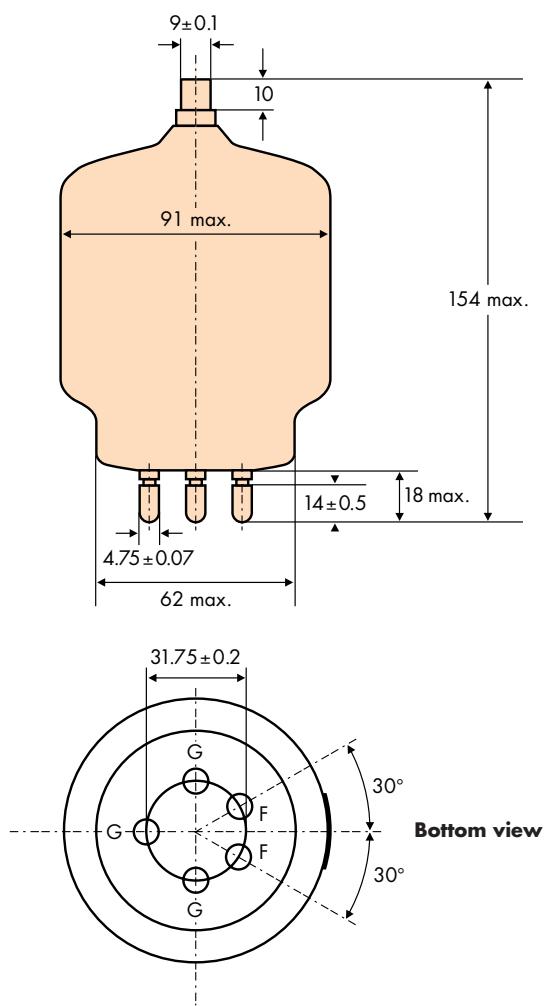
RF oscillator Class C

Frequency	75	75	MHz
Anode voltage	4	3	kV
Anode current	370	385	mA
Anode input power	1.48	1.155	kW
Anode output power	1.1	0.82	kW
Anode dissipation	380	335	W
Grid current	75	90	mA
Grid dissipation	10	12	W
Grid resistance	4.3	3.1	kΩ
Efficiency	74	71	%

Constant current characteristics



Outline drawing (dimensions in mm)



Accessories

Anode connector NBT 400066 P1
Socket NB 861920 P1



This document cannot be considered to be a contractual specification. The information given herein may be modified without notice due to product improvement or further development. Consult Thales Electron Devices before making use of this information for equipment design.

For further information, please contact:

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