

# PET3040CL

Forced Air Cooled Triode  
For RF Dielectric Heating Machines

Drop in equivalent of RS 3040 CL

- Output Power: 60 kW (CW mode)
- Anode voltage: 14 kV
- Anode dissipation: 25 kW
- Frequency up to 100 MHz

Manufactured in India, in a world-class facility equipped with high quality machinery, materials and components sourced from reputed suppliers in America, Europe and Japan.

Fifty-two weeks warranty against manufacturing defects irrespective of the number of hours of operation.



# PET3040CL

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The PET3040CL is a RF power triode designed for dielectric heating applications. This tube uses a coaxial design and metal-ceramic technology. This triode may be operated in CW or pulse modes. For operation in pulse mode, the parameters depend on each equipment characteristics. Contact us for specific information. The PET3040CL is a forced air cooled triode.

## Electrical characteristics

Cathode Filament	.	.	.	.	.	thoriated tungsten
Filament voltage	.	.	.	.	.	8 V
Filament current	.	.	.	.	.	185 A
Heater surge current (maximum)	.	.	.	.	.	560 A
Amplification factor	.	.	.	.	.	20
Capacitances:						
• Grid to Anode	.	.	.	.	.	29 pF
• Grid to Cathode	.	.	.	.	.	78 pF
• Cathode to Anode (see note 2)	.	.	.	.	.	2 pF

## Mechanical characteristics

Operating position	.	.	.	.	.	vertical
Weight	.	.	.	.	.	13 kg (28.7 lbs) approx.
Dimensions	.	.	.	.	.	see outline diagram

## Cooling (air-cooling)

Typical air temperature at tube inlet	.	.	.	.	.	25 °C
Minimum air flow cooling (for Pa=25 kW)	.	.	.	.	.	21 m <sup>3</sup> / min
Corresponding air pressure drop	.	.	.	.	.	11 mbar
Maximum temperature at any point on the tube envelop	.	.	.	.	.	220 °C

## Maximum ratings

Frequency	.	.	.	.	.	100 MHz
Anode voltage:						
• Up to 30 MHz	.	.	.	.	.	14 kV
• From 30 to 50 MHz	.	.	.	.	.	10 kV
• From 50 to 100 MHz.	.	.	.	.	.	7.5 kV
Control grid voltage	.	.	.	.	.	-1500 V
Control grid current:						
• At full load up to 30 MHz	.	.	.	.	.	1.6 A
• At off load up to 30 MHz	.	.	.	.	.	1.9 A
Peak cathode current	.	.	.	.	.	45 A
Anode dissipation	.	.	.	.	.	25 kW
Grid dissipation:						
• Up to 30 MHz	.	.	.	.	.	820 W
• From 30 to 50 MHz	.	.	.	.	.	700 W
• From 50 to 100 MHz.	.	.	.	.	.	600 W
Grid resistance	.	.	.	.	.	12 KΩ

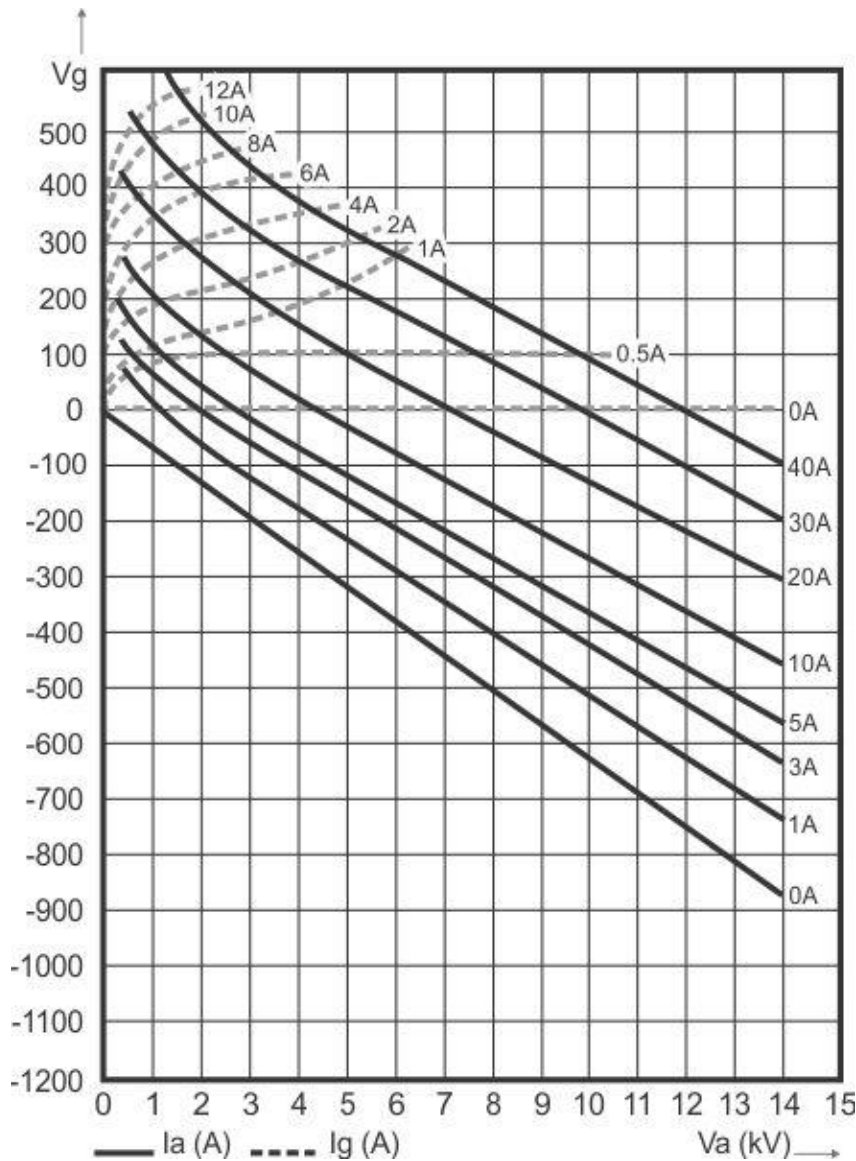


**Class C RF oscillator for industrial applications**

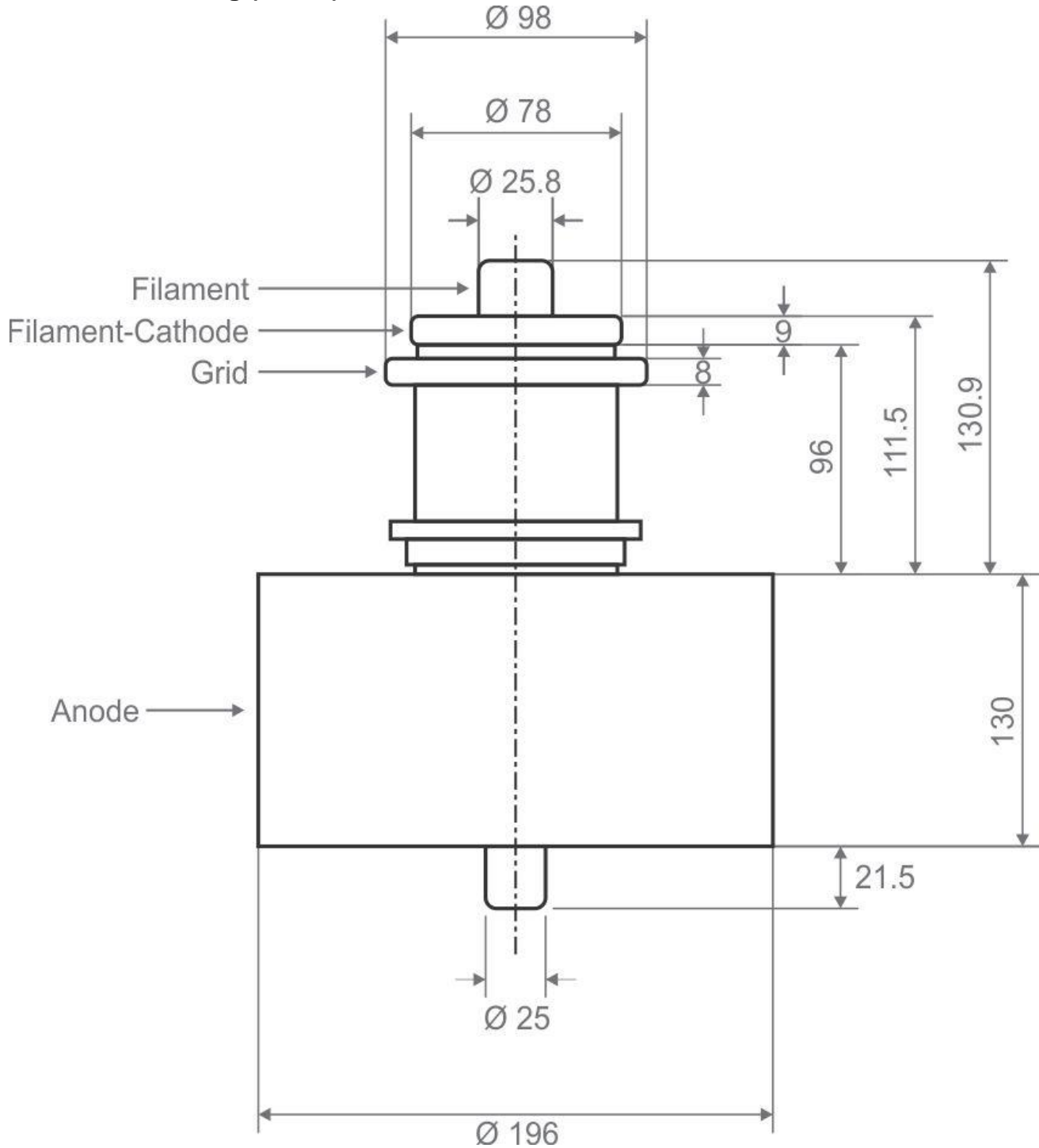
Frequency	. . . . .	<30	<30	MHz
Anode voltage	. . . . .	12	12	kV
Anode current	. . . . .	6.3	5.2	A
Anode input power	. . . . .	76	62.4	kW
Anode output power	. . . . .	60	50	kW
Anode dissipation	. . . . .	14	11	kW
Grid current, on load	. . . . .	1.2	1	A
Grid dissipation	. . . . .	470	350	W
Grid resistance	. . . . .	920	1000	$\Omega$
Feedback ratio	. . . . .	14.5	12.7	%
Oscillator efficiency	. . . . .	79	80	%

*Operations at higher frequencies available upon request*

**Constant current characteristics**



Outline drawing (in mm)



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