

ITL 9-1 Power Triode

ITL9-1 is a forced air cooled, metal/ceramic coaxial power triode, with thoriated-tungsten filament, intended for use in industrial heating, as well as pulse oscillator. Max frequency: 120MHz, max plate dissipation: 8.5KW.

General Characteristics

Filament voltage	5.8	V
Filament current	145	A
Filament surge current	600	A
Interelectrode capacitance		
Grid-Anode	21	pF
Grid-Cathode	55	pF
Anode -Cathode	1	pF
Amplification factor	22	
Transconductance ($V_a=10Kv, I_a=4A$)	50	mA/V
Operating position	Vertical, anode up or down	
Cooling	Forced air	
Cooling air flow, min	≥ 2	M ³ /m
Max inlet air temperature	45	°C
Temperature at seal, max	250	°C
Net weight	4.4	kg

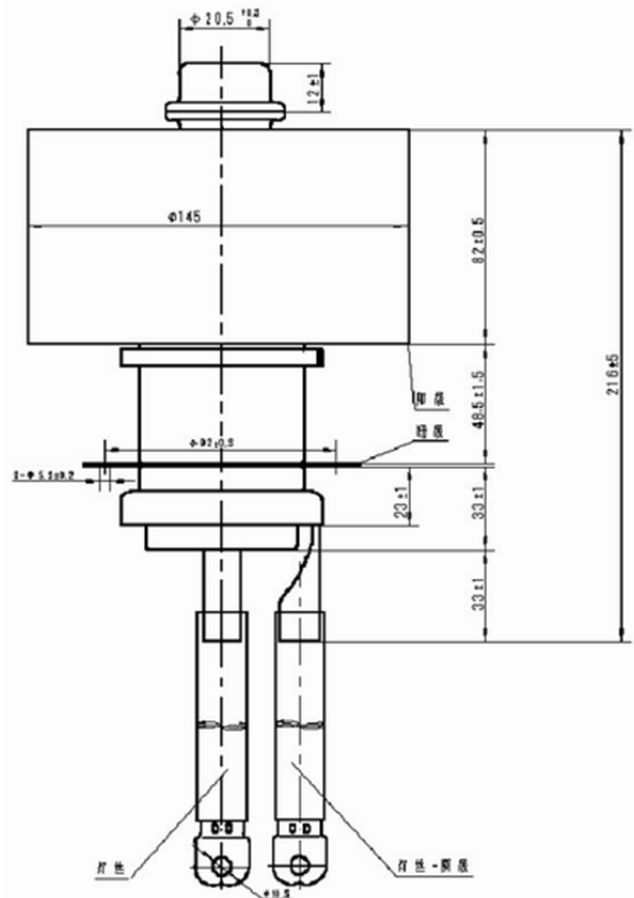
Maximum ratings

Operating frequency	120	MHz
Anode voltage		
Below 30MHz	12	kV
30~60MHz	9	kV
60~90MHz	7	kV
90~120MHz	6	kV
Anode current	4	A
Grid voltage	-1500	V
Grid current (full load)	0.8	A
Grid current (no load)	1.5	A
Peak cathode current, CW	25	A
Peak cathode current, pulse	35	A
Anode dissipation power	8.5	kW
Grid dissipation		
Below 30MHz	350	W
30~60MHz	320	W
60~90MHz	300	W
90~120MHz	280	W

Typical operation

Class C Radio Frequency Oscillator for Industrial applications (30MHZ)

Anode voltage	10	8	kV
Anode current	3.3	3.4	A
Grid bias voltage	-610	-520	V
Grid voltage	860	775	V
Grid current, on load	0.35	0.40	A
Grid dissipation	76	88	W
Grid resistance	1750	1300	Ω
Anode dissipation	9.6	8.6	kW
Anode Input power	33	27.2	kW
Anode Output power	24.7	19	kW
Feedback ratio	9.6	11	%
Oscillator efficiency	74.8	70	%



Distributore per l'Italia: