RF POWER TRIODE

Water cooled

QUICK REFERENCE DATA

Industrial RF oscillator, class-C				
freq.	V_a	W_{o}		
MHz	kV	kW		
30	12	39		
	10	31,3		
	8	23,2		

HEATING: direct; thoriated tungsten filament

Filament voltage	v_f	=	8 V
Filament current	l _f	#	130 A
Cold filament resistance	R_{fo}	=	0,006 Ω

The filament is designed to accept temporary fluctuations of +5% and -10%.

The filament current must never exceed a peak value of 280 A at any time during the initial energizing schedule.

CAPACITANCES

Ca	=	0,9 pF
$C_{\mathbf{g}}$	=	45 pF
C_{ag}	=	23,5 pF
		12 1.77
	c_g	C _g = C _{ag} =

Anode voltage	∨a	_	12 KV
Anode current	1 _a	=	2 A
Mutual conductance	S	=	22 mA/V
Amplification factor	μ	=	21

TEMPERATURE LIMITS (Absolute limits)

Temperature of all seals	max.	220 °C
Water inlet temperature	max.	50 °C

COOLING Generally a low velocity air flow to the seals is required.

Table 1 Cooling characteristics

anode dissipation W _a kW	inlet temperature Ti oC	rate of flow ^Q min I/min	pressure drop ΔP kPa*	max. outlet temperature To (°C)
20	20	22	50	35
	50	49	230	56
15	20	16	25	35
	50	37	130	56
10	20	11	10	35
	50	25	70	56
5	20	6	2	35
	50	15	22	56

ACCESSORIES

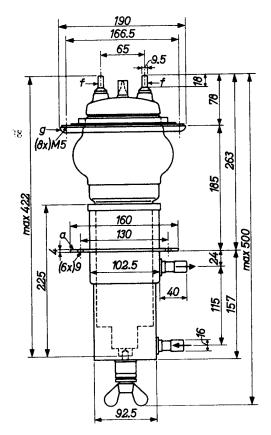
Filament connectors Grid connector Water jacket O-ring, large small

40662 40663 K722 2622 080 30895 2622 080 30736

^{* 100} kPa ≈ 1 at

MECHANICAL DATA

Dimensions in mm



Mounting position

: vertical with anode down.

Net mass of tube

: 3,0 kg

Net mass of water jacket

: 2,7 kg

For further data and curves (except cooling curves) please refer to type TBL12/38

Fig. 1 Mechanical outline.



TBW12/38

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