

## RF POWER TRIODE

- Water cooled

## QUICK REFERENCE DATA

Industrial RF oscillator, class-C

freq. MHz	$V_a$ kV	$W_o$ kW
30	12	39
	10	31,3
	8	23,2

**HEATING:** direct; thoriated tungsten filament

Filament voltage	$V_f$	=	8 V
Filament current	$I_f$	=	130 A
Cold filament resistance	$R_{fo}$	=	0,006 $\Omega$

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

Anode to all other elements except grid	$C_a$	=	0,9 pF
Grid to all other elements except anode	$C_g$	=	45 pF
Anode to grid	$C_{ag}$	=	23,5 pF

## TYPICAL CHARACTERISTICS

Anode voltage	$V_a$	=	12 kV
Anode current	$I_a$	=	2 A
Mutual conductance	$S$	=	22 mA/V
Amplification factor	$\mu$	=	21

## TEMPERATURE LIMITS (Absolute limits)

Temperature of all seals	max.	220 $^{\circ}\text{C}$
Water inlet temperature	max.	50 $^{\circ}\text{C}$

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

**Table 1** Cooling characteristics

anode dissipation $W_a$ kW	inlet temperature $T_i$ °C	rate of flow $q_{min}$ l/min	pressure drop $\Delta P$ kPa*	max. outlet temperature $T_o$ (°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  $\approx$  1 at



# PHILIPS

Data handbook



Electronic  
components  
and materials

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