

R.F. POWER TRIODE

QUICK REFERENCE DATA

λ (m)	Freq. (Mc/s)	C telegr.		C osc.		B teleph.		C _a mod.	
		V _a (V)	W _o (W)	V _a (V)	W _o (W)	V _a (V)	W _o (W)	V _a (V)	W _o (W)
4	75	2500	390			2500	65	2000	204
		2000	295			2000	64	1500	153
		1500	210			1500	59	1000	95
		1000	126						
2	150			2500	376				
1.5	200			2000	282				
				2000	198				

HEATING: direct; filament thoriated tungsten

Filament voltage $V_f = 6.3 \text{ V}$ Filament current $I_f = 5.4 \text{ A}$

CAPACITANCES

Anode to all other elements except grid

 $C_a = 0.1 \text{ pF}$

Grid to all other elements except anode

 $C_g = 4.3 \text{ pF}$

Anode to grid

 $C_{ag} = 5.2 \text{ pF}$

TYPICAL CHARACTERISTICS

Amplification factor $\mu = 25$ Mutual conductance $S (I_a = 44 \text{ mA}) = 2.8 \text{ mA/V}$

COOLING: radiation/low-velocity air flow

It is necessary to direct a low-velocity air flow to the bottom and the top seal if the tube is used at or near the limiting values at frequencies above 50 Mc/s.

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LIMITING VALUES (Absolute limits)

Anode voltage	$V_a = \text{max. } 2500 \text{ V}$
Anode dissipation	$W_a = \text{max. } 135 \text{ W}^1)$
Grid dissipation	$W_g = \text{max. } 16 \text{ W}$
Grid circuit resistance with fixed grid bias	$R_g = \text{max. } 0.1 \text{ M}\Omega$
Grid circuit resistance with automatic grid bias	$R_g = \text{max. } 0.2 \text{ M}\Omega$
Cathode current	$I_k = \text{max. } 250 \text{ mA}$
Peak cathode current	$I_{kp} = \text{max. } 1.6 \text{ A}$
Temperature of anode seal	$= \text{max. } 220 \text{ }^\circ\text{C}$
Bottom temperature	$= \text{max. } 180 \text{ }^\circ\text{C}$

MECHANICAL DATA

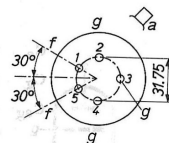
Base : giant 5p

Anode connector : 40624

Socket : 2422 512 01001

Socket with grounded
grid connections: 40215/01

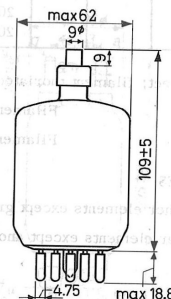
Net weight : 110 g



Mounting position: vertical with base up or down

¹⁾ Anode red hot, temperature = 850 °C

Dimensions in mm



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OPERATING CONDITIONS R.F. CLASS C TELEGRAPHY

Wavelength	$\lambda = 4$	4	4	4 m
Anode voltage	$V_a = 2500$	2000	1500	1000 V
Grid voltage	$V_g = -200$	-150	-110	-80 V
Anode current	$I_a = 205$	205	205	205 mA
Grid current	$I_g = 40$	40	40	40 mA
Peak grid A.C. voltage	$V_{gp} = 390$	340	300	260 V
Grid input power	$W_{ig} = 14$	13	11	10 W
Anode input power	$W_{ia} = 512$	410	308	205 W
Anode dissipation	$W_a = 122$	115	98	79 W
Output power	$W_o = 390$	295	210	126 W
Efficiency	$\eta = 76$	72	68	61.5 %

OPERATING CONDITIONS R.F. CLASS B TELEPHONY

Wavelength	$\lambda = 4$	4	4 m
Anode voltage	$V_a = 2500$	2000	1500 V
Grid voltage	$V_g = -87$	-67	-45 V
Anode current	$I_a = 77$	97	120 mA
Peak grid A.C. voltage	$V_{gp} = 100$	100	100 V
Anode input power	$W_{ia} = 193$	194	180 W
Anode dissipation	$W_a = 128$	130	121 W
Output power	$W_o = 65$	64	59 W
Efficiency	$\eta = 34$	33	33 %
Modulation depth	$m = 100$	100	100 %
Grid current	$I_g = 20$	28	52 mA
Grid input power	$W_{ig} = 3.6$	5.1	9.4 W

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