

VHF TETRODE

FU617F

PEAK-OF-SYNC OUTPUT POWER IN COMBINED AMPLIFICATION:

10 KW

PEAK-OF-SYNC OUTPUT POWER IN VISION CARRIER AMPLIFICATION:

21 KW

OUTPUT POWER IN FM RADIO TRANSMITTERS:

20 KW

GENERAL CHARACTERISTICS

Cathode	Thoriated tungsten
Heating	Direct
Filament voltage	10.4V+ 1 -3%
Filament current	112 A
Capacitances (grid earthed)	
Input	70pF
Output	25pF
Transconductance ($I_a=3A, U_{g2}=900V, U_a=6kV$)	70mA/V
Internal amplification factor ($I_a=3A, U_{g2}=850-900V, U_a=6kV$)	8.5
Operating position	Vertical, anode up or down
Weight, approx.	11 kg
Dimensions	See page 95
Anode cooling(1)	Forced air
Airflow, min.	$2 \times 104 \text{ L/min}$
Corresponding pressure drop	2400Pa
Temperature at air outlet, max.	110°C
Temperature at the sealing, max.	240°C
Temperature on tube surface, max.	200°C
(1) Values for cooling given for maximum anode dissipation	

MAXIMUM RATINGS

Frequency	250MHz
Anode voltage	9kV
Anode current	7A
Control-grid voltage	-500A
Screen-grid voltage	1kV
Anode dissipation	17kW
Control-grid dissipation	50W
Screen-grid dissipation	150W



TYPICAL OPERATION

		Combined Service	Vision only	FM Radio
Frequency	[MHz]	175-225	175-225	80-110
Output power	[kW]	10 (peak-of-sync)	21 (peak-of-sync)	≥20
Bandwidth	[MHz]	8(-1dB)	6(-1dB)	1.5(-3dB)
Intermodulation distortion	[dB]	≤-54	-	-
Gain	[dB]	≥16	15.5	≥17
Anode voltage	[kV]	7	7.5	9
Control-grid bias voltage	[V]	≈-100	≈-100	≈-90
Screen-grid voltage	[V]	900	800	700
Anode current (with signal)	[A]	≈2.9	≈3.6	≈3.4
Anode current (at zero signal)	[A]	1.8	1	1
Control-grid current	[mA]	≈0	≈100	≈150
Screen-grid current	[mA]	50	75	≈150