

FM/VHF Tetrode

FU820F

PEAK-OF-SYNC OUTPUT POWER IN TV VISION CARRIER AMPLIFICATION:
OUTPUT POWER IN FM TELEPHONY:

37kW
25.3kW

GENERAL CHARACTERISTICS

Cathode	Thoriated tungsten
Heating	Direct
Filament voltage	8.5V
Filament current	≈185A
Interelectrode capacitances, approx:	
Cathode-control grid	89pF
Control grid-screen grid	130pF
Screen grid-anode	27pF
Transconductance (I _a =3A)	85MA/V
Internal Amplification factor, average	7
Operating position	Vertical
Weight, approx.	15 kg
Dimensions	See page 95
Anode cooling(1)	Forced air
Air flow, min	33000L/min
Corresponding pressure drop	3000Pa
Temperature on tube surface, max.	250°C
(1) Values for cooling given for max. anode dissipation	



TYPICAL OPERATION

		Vision carrier amplification	FM teleph.
Frequency	[MHz]	220	-
Output power	[kW]	37(Peak- of-sync)	25.3
Bandwidth (-1dB)	[MHz]	6	-
Anode voltage	[kV]	8	7
Control-grid bias voltage	[V]	-120	-250
Screen-grid voltage	[kV]	1	0.8
Anode current (with signal)	[V]	7.3	5.1
Anode current (at zero signal)	[A]	1.5	-
Control-grid current	[mA]	105	130
Screen-grid current	[mA]	105	72

MAXIMUM RATINGS

Frequency	250MHz
Anode voltage	10kV
Anode Current	12A
Control -grid voltage	-1kV
Screen-grid voltage	1.5kV
Anode dissipation	30KW
Control-grid dissipation	200W
Screen-grid dissipation	400W