WVS-TECHNOLOGY

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UHF tetrode — *FC502F*

PEAK-OF-SYNC OUTPUT POWER IN COMBINED AMPLITICATION: 1.1 KW
PEAK-OF-SYNC OUTPUT POWER IN COMBINED AMPLITICATION: 2.2 KW

GENERAL CHARACTERISTICS

Cathode	Thoriated tungsten
Heating	Direct, DC or single phase AC
Filament voltage	6V(1)
Filament current	34A(1)
Interelectrode capacitances, approx:	
Cathode-control grid	40pF
Control grid-Screen grid	50pF
Screen grid-anode	8.2pF
Transconductance (Ua=1.5A,Ug2=400V)	40mA/V
Internal amplification factor, average	7
Operating position	Vertical
Weight, approx,	2.3kg
Dimensions	See page 95
Anode cooling(2)	Forced air
Air flow, min,	2500L/min
Pressure at air inlet, max.	300Pa
Temperature at air outlet, max,	100°C
Cooling at the sealing between electrode terminal and ceramic	Forced air
Temperature on tube surface, max.	250℃

(1) The operating filament voltage must be defined according to each particular situation, the range of the filament voltage being 6V±3%.
As an indication for equipment design purposes only. A given heater Voltage of 6V produces a given filament current of 34A.
(2) Values for cooling given for 2.5kW anode dissipation

MAXIMUM RATINGS

Frequency	1000MHz
Anode voltage	5kV
Anode current	2A
Anode dissipation	4.5kW
Control-grid dissipation	5W
Screen-grid dissipation	25W

TYPICAL OPERATION

		Combined Service	Vision only
Frequency	[MHz]	800	800
Peak-of-sync output power	[kW]	1.1	2.2
Bandwidth (-1dB)	[MHz]	8	6
Intermodulation distortion	[dB]	-54	-
Gain	[dB]	15.5	15.5
Anode voltage	[KV]	4	4
Screen-grid voltage	[V]	400	400
Anode current (with signal)	[A]	0.8	1.5
Anode current (at zero signal)	[A]	0.5	0.5
Control-grid current [mA]		-	2
Screen-grid current	[mA]	5	8