EME - PA 432 and 1296 MHz - TH313 - OK1DFC





Cavity with tube - Long 75 cm, weight 25kg



The TH 313 is a forced air-cooled ceramic metal tetrode, of coaxial structure. It can be use as a C.W. oscillator, or a grounded grid R.F. power amplifier at frequencies up tu 1,3 GHz. The anode can dissipate 7,5 kW.

TH313 is well adapted as a R.F. power amplifier in broadband television transmitters and in SSB or FM services.

TH313 – Parameters for SSB linear amplifier

Single side band suppressed – carrier service			
Two tone modulation			
Maximum ratings			
D.C. anode voltage	6,0 kV	Anode dissipation	7 kW
D.C. grid g2 voltage	800 V	Grid g2 dissipation	75 W
D.C. grid g1 voltage	- 250 V	Frequency	1,3 GHz
Anode Current at peak	3,5 A	, ,	-
Typical operation			
D.C. anode voltage	5,7 kV	Average g2 current at peak	70 mA
D.C. grid g2 voltage	700 V	Load impedance	1100 ohm
Zero signal anode current	0,7 A	Circuit efficiency	<i>90%</i>
Anode Current at peak	2,7 A	Average load power	3,5 kW
Average anode current	1,9 A	Load peak power	7 kW