



EITEL-McCULLOUGH, INC.
SAN CARLOS, CALIFORNIA

EM 113
TRAVELING WAVE
TUBE

The EM113 delivers 1 kw of pulse power from 2.0–4.0 Gc. It is of metal-ceramic construction and is suitable for airborne and missile applications. The focusing is accomplished by periodic permanent magnet and compensated for operation over the temperature range -65°C to $+125^{\circ}\text{C}$.

ELECTRICAL SPECIFICATIONS

Absolute Ratings

Filament Voltage	7.0 Volts	Maximum
Pulse Cathode Voltage	-8000 vdc	
Peak Cathode Current	2.0 adc	
Duty Cycle	2%	

Operating and Performance Data

Filament Voltage	6.3 Volts
Filament Current	3.0 Amperes
Cathode Voltage	-7500 Vdc
Peak Cathode Current	1.3 adc
Duty Cycle	2%
Frequency Range	2.0–4.0 Gc
Small Signal Gain—Minimum	36 db
Peak Saturated Power Out—Minimum	1.0 kw
Saturated Gain—Minimum	30 db

ENVIRONMENTAL SPECIFICATIONS

Complies with MIL-5400 Class II Equipment	
Temperature	-65°C to $+125^{\circ}\text{C}$

MECHANICAL SPECIFICATIONS

Operating Position	Any
Input Coupling, rf	TNC
Output Coupling, rf	TNC
Focusing	PPM
Cooling	75 CFM forced air
Dimensions	See outline drawing
Weight	9 lbs.
Supply Connections	Cathode—yellow Filament—brown Grid—green

NOTE: Electrode Voltages are with respect to cathode; tube shell at ground potential.



