



EITEL-McCULLOUGH, INC.
SAN CARLOS, CALIFORNIA

EM 114

TRAVELING WAVE TUBE

The EM114 is a grid modulated pulse TWT covering the frequency range of 2.8-3.5 Gc with a peak power output of 2.0 kw. This tube is designed for use in airborne and missile environments.

ELECTRICAL SPECIFICATIONS

Absolute Ratings

	Maximum
Filament Voltage	7.0 Volts
Cathode Voltage	-8000 vdc
Peak Cathode Current	2.0 adc
Grid Voltage	+400 to -150 vdc
Duty Cycle	2%

Operating and Performance Data

Filament Voltage	6.3 Volts
Filament Current	3.0 Amperes
Cathode Voltage	-7800 Vdc
Peak Cathode Current	1.5 adc
Grid Voltage (Beam on)	200 Vdc
Grid Voltage (Beam off)	-90 Vdc
Duty Cycle	2%
Frequency Range	2.8-3.5 Gc
Small Signal Gain—Minimum	36 db
Saturated Power Out—Minimum	2.0 kw
Saturated Gain—Minimum	30 db
Grid Capacitance (to all other elements)	15 picofds.

ENVIRONMENTAL SPECIFICATIONS

Complies with MIL-5400 Class II Equipment	
Temperature	-65°C to +125°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.



