



E I M A C
 Division of Varian
 SAN CARLOS
 CALIFORNIA

EM-1061B

TRAVELING WAVE TUBE
 2.0-4.0 GHz
 2 W C.W. Min.
 40 dB Min. S.S.G.

The EM1061B TWT is one of a family of light weight, high performance TWTS available from EIMAC. Applications include both airborne and ground based systems subject to stringent environments where reliable, long life performance is of major concern. Typical applications are as ECM drivers, airborne radar, communications, radar augmenters, and special test equipment.



FEATURES

- Small Size
- Light Weight
- Metal-Ceramic Construction
- PPM Focusing
- High Gain
- High Efficiency
- Broadband Operation
- Versatile Operation
- Conduction Cooling

GENERAL CHARACTERISTICS

PERFORMANCE

Frequency Range	2.0-4.0 GHz
Saturated Power Output (Min)	2 W
(Typical).....	3 W
Small Signal Gain (Min).....	40 dB
(Typical).....	45 dB
Saturated Gain (Min)	35 dB
(Typical).....	40 dB
Output VSWR (Max)	2.5:1
Input VSWR (Max).....	2.5:1
Impedance (Nominal)	50Ω
Noise Figure (Max)	30 dB
(Typical).....	25 dB

NOTE: These data may be used for prototype design purposes. Before establishing production design specifications, contact the nearest Varian Sales Office or Microwave Product Manager, EIMAC Division of Varian, 301 Industrial Way, San Carlos, Calif. 94070



ELECTRICAL

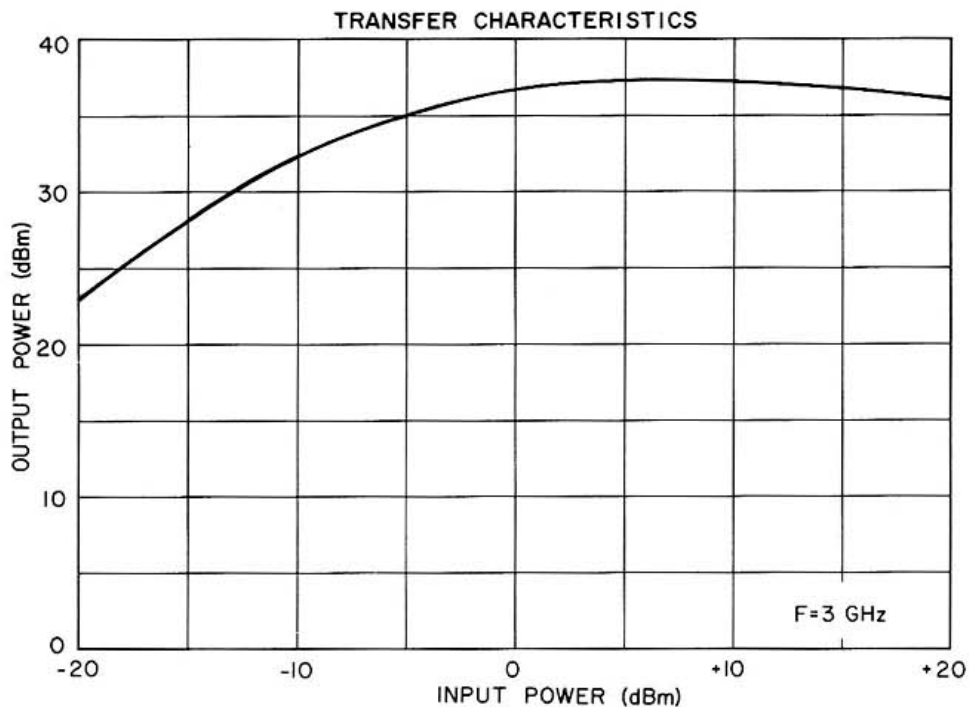
	<i>Min.</i>	<i>Max.</i>	<i>Units</i>
Cathode Voltage	-900	-1200	V
Cathode Current	25	40	mA
Grid Voltage	15	30	V (Ref to Cath)
Grid Current		8	mA
Helix Voltage	GND		ground
Collector Voltage	GND		ground
Heater Voltage (Nominal)	6.3		V
Heater Current (Nominal)	0.5		A

ENVIRONMENT

Vibration	15G, 5 to 500 cps
Shock	25G, 11 ms
Acceleration	10G sustained
Temperature	-54°C to 85°C
Altitude (unpressurized)	to 70,000 ft.

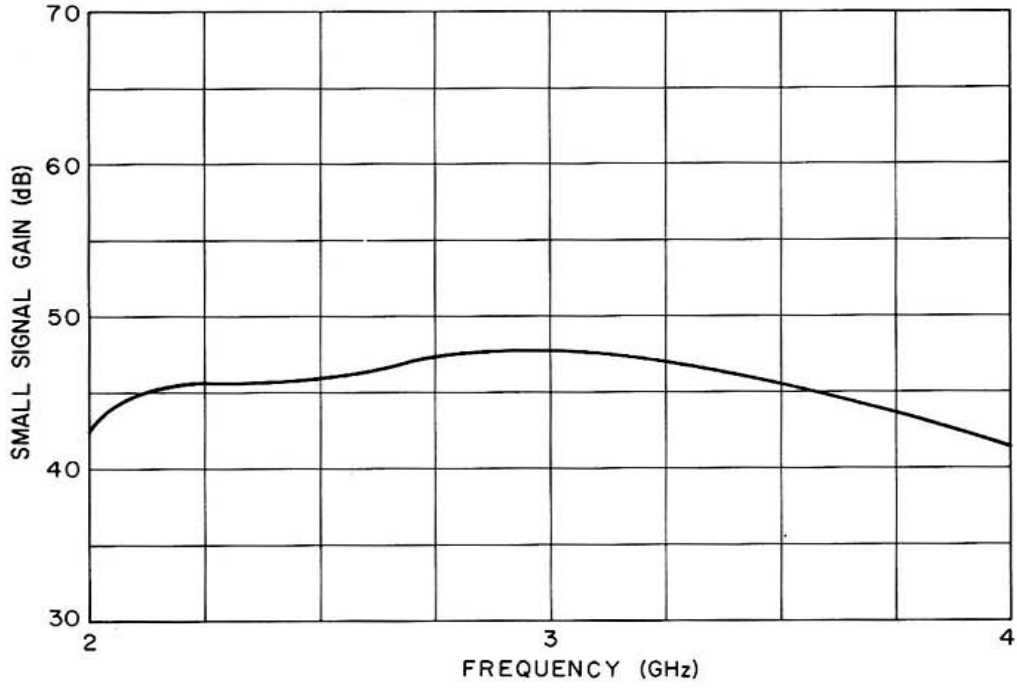
MECHANICAL

Length	8-3/4 in.
Width	1 in.
Height (excluding RF connectors)	1-1/8 in.
Weight	1-1/4 lb
Cooling	Conduction
D.C. Connections	Flying Leads
RF Connectors	OSM Female
Mounting Position	Any

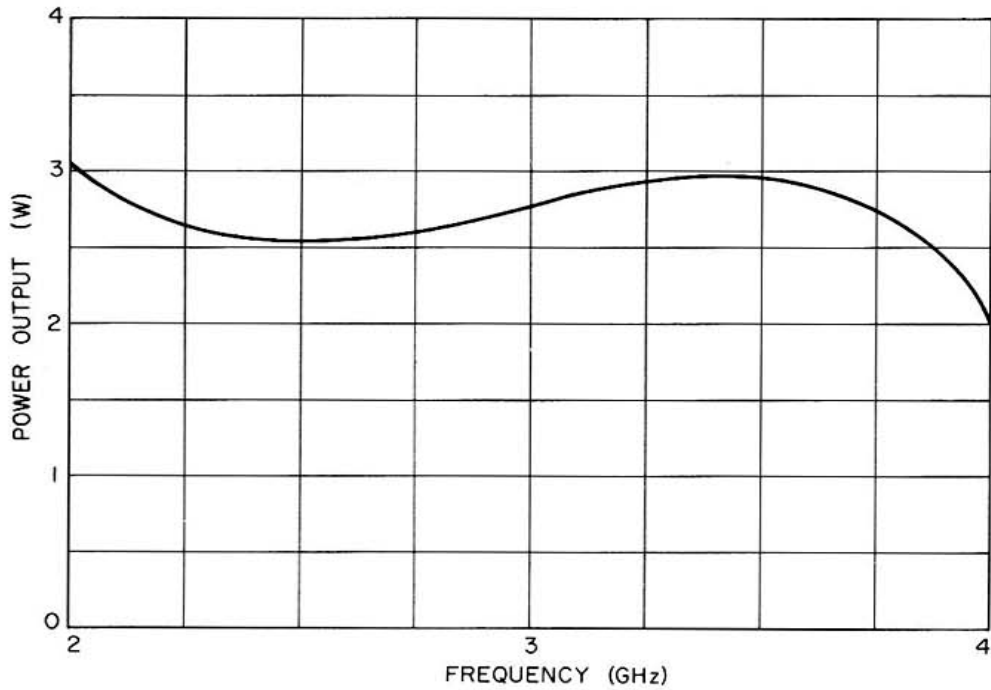




GAIN CHARACTERISTICS

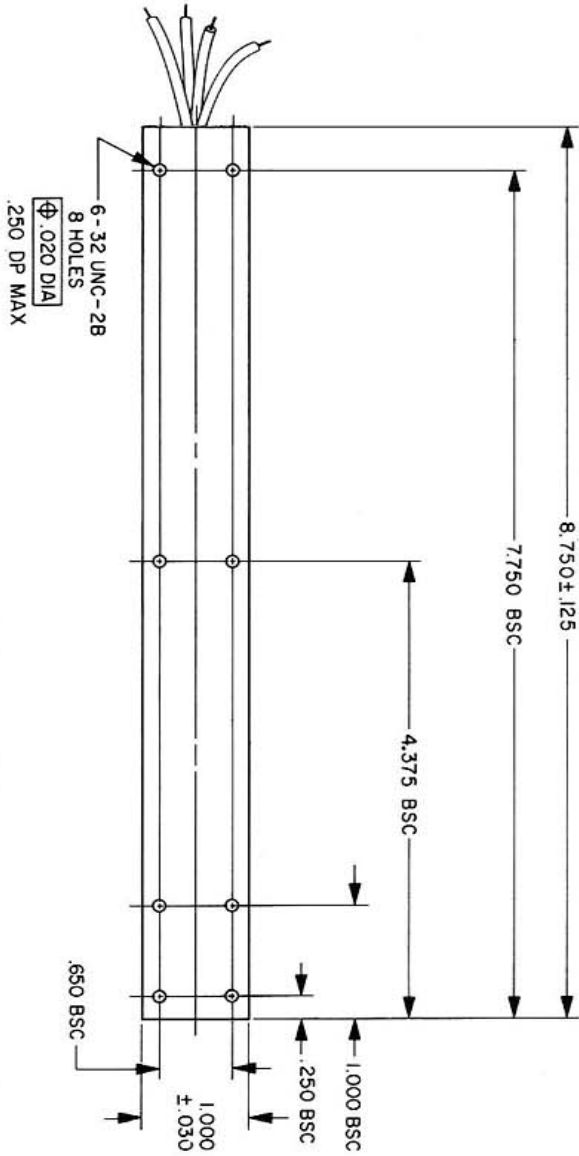


POWER OUTPUT CHARACTERISTICS





EM-1061B



LEAD	ELEMENT
BROWN	HEATER
YELLOW	HEATER CATHODE
BLACK	GROUND
GREEN	GRID

