

engineering data service

ADVANCE DATA

MECHANICAL DATA

Mounting Position	Any
Base	Flying Leads
Weight	Approx. 7.5 lbs.
Cooling	Ambient
Minimum magnet isolation	2 inches
Output	Coaxial type "N" female
Shock	50 G'S, 4 millisecc.
Vibration	25-55 cps at .080 displacement
Temperature (Storage)	-55°C to +125°C

ELECTRICAL DATA

HEATER CHARACTERISTICS

Voltage	6.3 V
Current	1.6 A
Minimum preheat time	1 Minute

ABSOLUTE MAXIMUM - PARAMETERS PER PARA. 6.5 MIL-E-1D

Frequency	4,100 Mc
Delay line voltage	1,540 Vdc
Delay line current	45 mAdc
Heater voltage	7 V
Anode voltage	160 Vdc
Cut-off grid	-100 Vdc
Isolation (output from base)	1800 Vdc

TYPICAL OPERATION

Frequency Range	2,000 - 4,000 Mc
Delay line voltage	150 - 1,400 Vdc
Delay line current	40 mAdc
Anode current	1-5 mAdc
Anode voltage	120 Vdc
Grid voltage	0 Vdc
Power output	100 mw
Spurious Osc.	-40 db

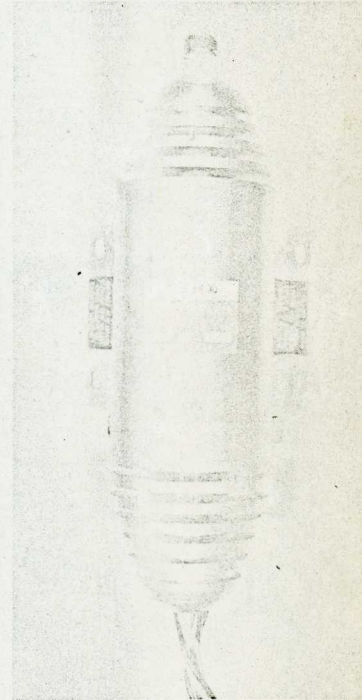
APPLICATION NOTES

SYB-4400 is designed with a special control electrode to facilitate low voltage, pulsed or amplitude modulation. With a wide range of electronically controlled frequency, and low noise capability, the SYB-4400 is ideally suited for application in microwave receivers and generator systems requiring versatile and instantaneous frequency sweeping by electronic means. This tube may also be used for electronic test apparatus requiring wide frequency response.

Additional information and assistance with specific applications may be obtained by contacting Sylvania Microwave Device Division, Williamsport, Pennsylvania.

QUICK REFERENCE DATA

Interdigital line type
 Backward-Wave Oscillator
 2,000 - 4,000 Mc
 100 mw min. power output
 CW or pulsed operation
 Integral permanent magnet
 Low noise tube
 Ambient cooled
 Output isolated from package

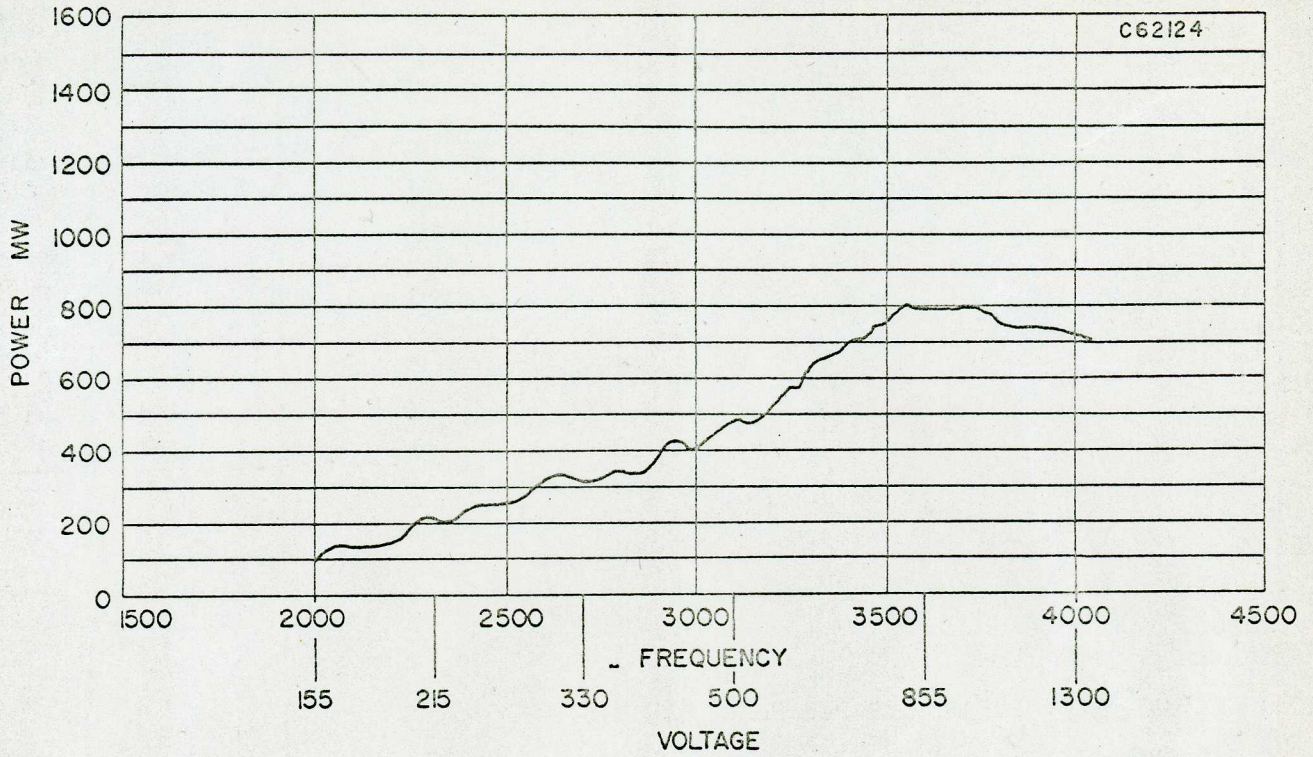


SYLVANIA ELECTRIC PRODUCTS INC.

**MICROWAVE DEVICE DIVISION
 WILLIAMSPORT, PA.**

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 EMPORIUM, PENNSYLVANIA*

TYPICAL POWER OUTPUT VERSUS FREQUENCY AND DELAY LINE POTENTIAL



OUTLINE

