



engineering data service

ADVANCE DATA

MECHANICAL

Mounting position	Any
Weight	Approx. 11 lbs.
Cooling	Forced air
Output pressurization	45 psia max.
Minimum magnet isolation	4 inches
Output coupling	Couples to UG-52A/U
Tuner drive mechanism	Rotating shaft*
Shock	30 G for 11 millisec.
Vibration	5 g, 5-500 cps
Tuner torque	Approx. 20 in. oz.

*Manual or servo tuned

ELECTRICAL

HEATER CHARACTERISTICS

Voltage	13.75 V
Current	3.2 A
Minimum preheat time	2.5 Minutes

RATINGS (absolute maximum)¹

Heater voltage	15 V
Heater surge current	12 A
Average power input	690 W
Anode temperature	150°C
Voltage standing wave ratio	1.5:1
Duty cycle	0.0013
Pulse width	3.3 usec

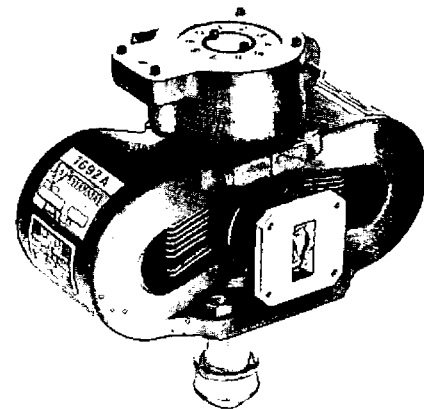
TYPICAL OPERATION	Osc.1	Osc.2	Osc.3
Duty cycle	0.0005	0.00075	0.001
Pulse width	0.275 usec	1.0 usec	3.15 usec
Rate of rise of voltage	200 kv/usec	200 kv/usec	200 kv/usec
Average anode voltage	14 mAdc	21 mAdc	27.5 mAdc
Peak anode voltage	22 kv	22 kv	22 kv
Average power output	110 W	165 W	220 W
Pulling factor	12 Mc	12 Mc	12 Mc
Pushing factor	0.25 Mc/A	0.25 Mc/A	0.25 Mc/A

¹If the independent absolute ratings are exceeded, serviceability of the tube may be impaired. Refer to MIL-E-1D, para. 6.5.

NOTE: Dependable operation and maximum magnetron life can be realized only if the complete system is designed with the magnetron characteristics clearly in mind. This preliminary data sheet is intended to acquaint the reader with the basic characteristics of the magnetron and should not be used as an absolute guide. Additional information and assistance with specific applications may be obtained by contacting Sylvania Microwave Device Operations, Williamsport, Pennsylvania.

QUICK REFERENCE FACTS

X-band tunable magnetron
8,550 to 9,650 Mc tunable
220 kw peak power output
Ruggedized
Pulsed operation
Integral magnets



Used in airborne fire-control systems with MTI capabilities.

**SYLVANIA ELECTRIC
PRODUCTS, INC.
MICROWAVE DEVICE OPERATIONS
WILLIAMSPORT, PA.**

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