



SYLVANIA

7503

engineering data service

ADVANCE DATA

MECHANICAL DATA

Mounting Position	Any
Weight	Approx. 6 oz.
Cooling	Convection and Conduction
Minimum Magnet Isolation	2 Inches
Output Coupling	TNC connector
Tuner Drive Mechanism	See Note
Shock and Vibration	500 g

ELECTRICAL DATA

HEATER CHARACTERISTICS

Voltage	5.0 V
Current (at 5.0 V)	0.6 to 0.7 A
Min. Preheat Time	45 Sec.

RATINGS (Absolute Maximum)¹

Heater Voltage	5.5 V
Heater Current	1.15 A
Peak Anode Voltage	2.0 kv
Average Power Input	3.75 W
Anode Temperature	100 °C
VSWR	1.5 : 1
Duty Cycle	0.002

¹ The independent absolute ratings must not be exceeded. These ratings are limiting values beyond which the serviceability of any tube may be impaired. It does not necessarily follow that combinations of ratings can be attained simultaneously.

TYPICAL OPERATION

	Osc. 1	Osc. 2
Duty Cycle	0.002	0.0001
Pulse Width	1.0 μ sec	0.4 μ sec
Voltage Rise Time	0.1 to 0.2 μ sec	0.1 to 0.2 μ sec
Average Anode Current	1.9 mA _{dc}	0.095 mA _{dc}
Peak Anode Voltage	1.45 kv (norm)	1.45 kv (norm)
Average Power Output	0.2 W (min.)	0.0060 W (min.)*
Pulling Factor	15 Mc (max.)	15 Mc (max.)
Pushing Factor	3 Mc (max.)	3 Mc (max.)
Tunable Frequency	F1 = 9500 Mc F2 = 9400 Mc F3 = 9300 Mc	F1 = 9500 Mc F2 = 9400 Mc F3 = 9300 Mc

* The power output is measured at worst phase of a 1.5 VSWR mismatch.

Note: The tube is tuned by: (1) Unlocking the tuner by loosening the set screws on the side of the tuner housing, (2) turning the tuner screw in either direction with a non-magnetic screw driver, and (3) tightening the set screw to lock the tuner.

QUICK REFERENCE DATA

Tunable Beacon Magnetron
9300-9500 Mc
100 watts Peak Power
Pulsed Operation
Integral Magnets

SYLVANIA ELECTRIC
PRODUCTS INC.

SPECIAL TUBE OPERATIONS
Mountain View, California

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