



RADIO MANUFACTURERS ASSOCIATION
ENGINEERING DEPARTMENT

Release No. 462

January 5, 1946

sponsor:
General Electric Co.

RMA TYPE
5J33
Magnetron
(External Magnet Required)

GENERAL CHARACTERISTICS

Electrical

Filament - Tungsten	
Filament Voltage *	2.1 Volts
Filament Current maximum	40 Amperes
Frequency	750 to 1150 Megacycles
Field Strength	1500 Gauss

Mechanical

Dimensions (See outline N-20501AZ)

Type of Cooling	Liquid and Forced-air
Anode, liquid cooling	2 Quarts Per Minute
Maximum Outlet Temperature	70 C

Seals

Forced-air cooling shall be provided so that the maximum seal temperature does not exceed 150 C.

Mounting Position - Any

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

	<u>Typical Operation</u>		<u>Maximum Ratings</u>	
D-C Plate Voltage $\neq$	1500	2200	2500	Volts
Plate Dissipation	360	630	700	Watts
Plate Input	600	880	900	Watts
D-C Plate Current	400	400	400	Milliamperes
Conversion Efficiency, approximate	40	30		Per Cent
Power Output	240	260		Watts
Frequency	750	1150		Megacycles
Duty				CW

* The filament supply should provide 0 to 2.5 volts, continuously variable, at 40 amperes. In operation Ef should be adjusted to the lowest value consistent with optimum operation, then maintained accurately. During starting If should never exceed 60 amperes.

$\neq$ The plate supply should have sufficiently poor regulation or series resistance to permit stable operation and prevent excessive plate dissipation. The tube should be operated with optimum loading at all times. Either overloading or insufficient loading may result in undesirable operation or damage to the tube.

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