

EITEL-McCULLOUGH INC.  
 San Bruno, California

EIMAC 50T

The 50T is a medium mu general purpose three element vacuum tube designed to give high output at audio and radio frequencies up to 75 megacycles. The 50T may be used, at reduced output, up to 300 megacycles. The grid and plate are cylindrical and made of degassed Tantalum. Momentary overloads will not release gas from any of the tube elements and there is no "Getter" inside the envelope to give off gas when heated. The plate lead comes out the top of the glass envelope and the grid lead is brought out the side, which reduces interelectrode capacities and increases the interelectrode insulation. The unusually low plate resistance coupled with the average mu of 12 results in a very high transconductance which makes the tube easy to drive to high power output and plate efficiency at both audio and radio frequencies.

FILAMENT VOLTAGE	5 volts
FILAMENT CURRENT	6 amperes
FILAMENT HEATING POWER	30 watts
RATED PLATE DISSIPATION	50 watts
AMPLIFICATION FACTOR (average)	12
PEAK FILAMENT EMISSION	3 amperes
NORMAL MAXIMUM PLATE CURRENT	100 MA
NORMAL MAXIMUM GRID CURRENT	30 MA
PLATE-GRID CAPACITANCE	2.5 uufds.
GRID-FILAMENT CAPACITANCE	2.0 uufds.
PLATE-FILAMENT CAPACITANCE	.4 uufds.
ENVFLOPE	Nonex
BASE	UX 4 pin
OVERALL HEIGHT	7 $\frac{1}{2}$ inches
MAXIMUM DIAMETER	3 $\frac{1}{8}$ inches

OPERATING CONDITIONS

CLASS C RADIO FREQUENCY POWER AMPLIFIER

PLATE VOLTAGE	1000 V	2000	3000
PLATE CURRENT	100 MA	100	100
GRID CURRENT (DC)	25 MA	25	25
GRID BIAS VOLTAGE	200 V	400	600
POWER OUTPUT (75% eff.)	75 W	150	250
		at 83% eff.	

The EIMAC 50T is specially suited for Class B audio use and a pair will give 150 watts output at 1000 volts on the plate, 200 watts at 2000 V and 250 watts at 3000 volts. The operating range of the filament is between 5.0 and 5.2 volts and care should be taken to see that the filament is never operated below five volts. The guarantee is invalid unless a suitable filament voltmeter accurately indicates the voltage across the socket terminals at all times.

"COMPARE AND REFLECT"