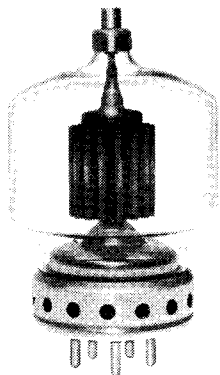


## Internal Anode, Radiation Cooled Tetrodes 4-400C/6775



The 4-400C/6775 is a compact, ruggedly constructed, broadcast-quality tetrode having a maximum plate dissipation rating of 400 watts. It is intended for use as an amplifier, oscillator, or modulator. The low grid-plate capacitance of this tetrode coupled with its low driving-power requirement allows considerable simplification of the associated circuit and driver stage.

The 4-400C/6775 is cooled by radiation from the plate and by circulation of forced-air through the base, around the envelope, and over the plate seal. Cooling can be greatly simplified by using an EIMAC SK-400 Series Air-System Socket, and its accompanying glass chimney.

The 4-400C/6775 is especially recommended for applications where long life and consistent performance are of prime consideration.

### CHARACTERISTICS

Plate Dissipation (Max.) . . . . . 400 watts  
Screen Dissipation (Max.) . . . . . 35 watts  
Grid Dissipation (Max.) . . . . . 10 watts  
Frequency for Max. Ratings (CW) . . . . . 110 MHz  
Cooling . . . . . Radiation & Forced Air  
Filament . . . . . Thoriated tungsten  
Voltage . . . . . 5.0 volts  
Current . . . . . 14.7 amperes  
Capacitances (Gnd. Cath. Connection):  
Input . . . . . 12.5 pF  
Output . . . . . 4.7 pF  
Feed-through . . . . . 0.12 pF  
Amplification Factor ( $g_{1-92}$ ) . . . . . 5.1  
Transconductance $\ddagger$  . . . . . 4000  $\mu$ mhos  
Base . . . . . 5-Pin Special  
Recommended Air-System Socket . . . SK-400 Series  
Recommended Air Chimney . . . . . SK-406  
Recommended Heat Dissipating Connector . . HR-6  
Maximum Plate Seal Temperature . . . . . 225°C  
Maximum Base Seal Temperature . . . . . 200°C  
Maximum Length . . . . . 6.38 in; 162.00 mm  
Maximum Diameter . . . . . 3.56 in; 90.40 mm  
Weight (approximate) . . . . . 9.0 oz; 255 gm  
Operating Position . . . . . Any

Class of Operation      Type of Service		MAXIMUM RATINGS		TYPICAL OPERATION					
		Plate Voltage (volts)	Plate Current (amps)	Freq. (MHz)	Plate Voltage (volts)	Screen Voltage (volts)	Plate Current (amps)	Drive Power (watts)	Output Power (watts)
C	RF Power Amplifier	4000	0.35	75	4000	500	0.35	5.8	1100
C	RF Power Amplifier	4000	0.35	110	4000	500	0.54*	20	1440†
C	RF Power Amplifier Plate Modulated	3200	0.27	75	3000	500	0.27	3.5	630
AB <sub>1</sub>	RF Linear Amplifier	4000	0.35	75	3000	750	0.29	—	470†
AB <sub>1</sub>	AF Amplifier or Modulator	4000	0.35	—	4000	750	0.59*	—	1540*
AB <sub>2</sub>	AF Amplifier or Modulator	4000	0.35	—	4000	500	0.64*	7.0	1750†

\*Two tubes

†Useful Output Power

$\ddagger$  At  $I_b = 100$  mA