



EITEL-McCULLOUGH, INC.  
SAN CARLOS, CALIFORNIA

TENTATIVE DATA  
**8349**  
**4CX35,000C**  
RADIAL BEAM  
POWER TETRODE

The Eimac 8349/4CX35,000C is a ceramic-metal, forced-air cooled power tetrode intended for use at the 50 to 150 kilowatt output power level. It is recommended for use as a Class-C rf amplifier or oscillator, a Class-AB, rf linear amplifier or a Class-AB, push-pull af amplifier or modulator. The 8349/4CX35,000C is also useful as a plate and screen modulated Class-C rf amplifier.

The forced air cooled anode is rated at 35 kilowatts of plate dissipation.



**GENERAL CHARACTERISTICS**

**ELECTRICAL**

Filament:	Thoriated Tungsten	
Voltage	- - - - -	10 volts
Current	- - - - -	300 amps
Amplification Factor (Grid-Screen) (average)	- - - - -	4.5
Direct Interelectrode Capacitances, Grounded Cathode:		
Input	- - - - -	430 uuf
Output	- - - - -	45 uuf
Feedback	- - - - -	2.3 uuf
Frequency for Maximum Ratings	- - - - -	30 Mc

**MECHANICAL**

Base	- - - - -	Special, graduated rings
Maximum Seal Temperature	- - - - -	250° C
Maximum Anode Core Temperature	- - - - -	250° C
Recommended Socket	- - - - -	Eimac, SK-1500
Operating Position	- - - - -	Vertical, base up or down
Maximum Dimensions:		
Height	- - - - -	15.0 inches
Diameter	- - - - -	9.75 inches
Cooling	- - - - -	Forced air
Net Weight	- - - - -	50 pounds
Shipping Weight (approximate)	- - - - -	80 pounds

**RADIO-FREQUENCY POWER AMPLIFIER  
OR OSCILLATOR**

**TYPICAL OPERATION**  
(Frequencies below 30 megacycles)

Class-C Telegraphy or FM Telephony (Key-down conditions)

DC Plate Voltage	- - -	10	15	20	kV
DC Screen Voltage	- - -	750	750	750	volts
DC Grid Voltage	- - -	-425	-480	-545	volts
DC Plate Current	- - -	6.70	6.45	6.35	amps
DC Screen Current	- - -	.925	.810	.895	amp
DC Grid Current	- - -	.320	.355	.335	amp
Peak RF Grid Voltage	- - -	575	640	695	volts
Driving Power	- - -	185	225	230	watts
Plate Dissipation	- - -	12.0	14.0	17.0	kW
Plate Output Power	- - -	55.0	82.5	110.0	kW

<b>MAXIMUM RATINGS</b>	
DC PLATE VOLTAGE	- - - 20,000 MAX. VOLTS
DC SCREEN VOLTAGE	- - - 2500 MAX. VOLTS
DC PLATE CURRENT	- - - 15.0 MAX. AMPS
PLATE DISSIPATION	- - - 35,000 MAX. WATTS
SCREEN DISSIPATION	- - - 1750 MAX. WATTS
GRID DISSIPATION	- - - 500 MAX. WATTS

Note: Maximum plate voltage and plate current cannot be applied simultaneously without exceeding dissipation ratings.

K10YB

