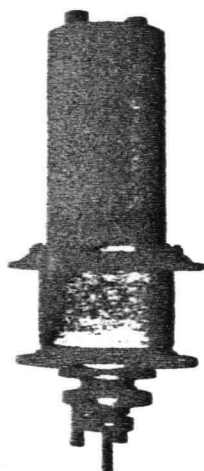


4CW250,000B



The 4CW250,000B is recommended as a Class C amplifier or oscillator; a Class AB RF linear amplifier; a Class AB push-pull AF linear amplifier or modulator; a plate or screen modulated Class C RF amplifier; or for pulse modulator or regulator service. Water jacket not included.

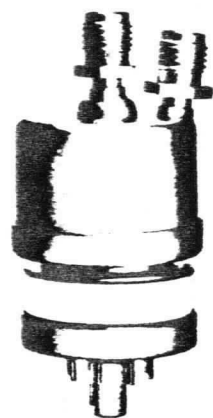
CHARACTERISTICS

Plate Dissipation (Max.)	250,000 watts
Screen Dissipation (Max.)	3,500 watts
Grid Dissipation (Max.)	1,500 watts
Frequency for Max. Ratings (CW)	50 MHz
Cooling	Water and Forced Air
Filament	Thoriated Tungsten
Voltage	12.0 volts
Current	880 amperes
Capacitances (Gnd. Cath. Connection):	
Input	745 pF
Output	124 pF
Feed-through	8.0 pF
Capacitances (Gnd. Grid Connection):	
Input	324 pF
Output	128 pF
Feed-through	1.2 pF
Amplification Factor ($g_1 - g_2$)	4.5
Base	Special
Recommended Filament Connector	SK-1710
Recommended Grid Connector	SK-1712
Recommended Anode Water Jacket	SK-1720
Maximum Seal & Envelope Temperature	200°C
Maximum Length:	27.65 in; 70.23 cm
Maximum Diameter:	13.06 in; 33.17 cm
Weight (approximate) (tube only)	98.0 lb; 44.5 kg.
Operating Position	Vertical, base up or down

Class of Operation	Type of Service	MAXIMUM RATINGS		TYPICAL OPERATION				
		Plate Voltage (volts)	Plate Current (amps)	Plate Voltage (volts)	Screen Voltage (volts)	Plate Current (amps)	Drive Power (watts)	Output Power (kW)
C	RF Amplifier	20,000	40.0	19,000	800	32.5	3000	480
C	RF Amplifier Plate Modulated	17,500	30.0	14,000	800	29.0	2320	285
AB ₁	RF Linear Amplifier	20,000	40.0	20,000	1800	23.0	—	330
AB ₁	AF Amplifier or Modulator	20,000	40.0	20,000	1800	48.0*	—	660*

*Two tubes.

4W300B/8249



The 4W300B/8249 is a water-cooled version of the 4CX250B/7203 having an anode dissipation rating of 300 watts. It is intended for use where water cooling is preferred or when reserve anode dissipation is desired.

CHARACTERISTICS

Plate Dissipation (Max.)	300 watts
Screen Dissipation (Max.)	12 watts
Grid Dissipation (Max.)	2 watts
Frequency for Max. Ratings (CW)	500 MHz
Cooling	Water and Forced Air
Cathode	Oxide-coated Unipotential
Voltage	8.0 volts
Current	2.6 amperes
Capacitances (Gnd. Cath. Connection)	
Input	15.7 pF
Output	4.5 pF
Feed-through	0.04 pF
Capacitances (Gnd. Grid Connection)	
Input	13.0 pF
Output	4.5 pF
Feed-through	0.01 pF
Amplification Factor ($g_1 - g_2$)	5
Base	9-Pin Special
Recommended Air System Socket	SK-600 Series
Maximum Seal & Anode Core Temperature	250°C
Maximum Length	3.4 in; 86.5 mm
Maximum Diameter	1.56 in; 39.7 mm
Weight (approximate)	5.75 oz; 163 gm
Operating Position	Vertical, base up or down

Class of Operation	Type of Service	MAXIMUM RATINGS		TYPICAL OPERATION				
		Plate Voltage (volts)	Plate Current (amps)	Plate Voltage (volts)	Screen Voltage (volts)	Plate Current (amps)	Drive Power (watts)	Output Power (watts)
C	RF Amplifier up to 175 MHz	2000	0.25	2000	300	0.25	2.9	390
C	RF Amplifier Plate Modulated up to 175 MHz	1500	0.20	1500	250	0.20	1.7	235
AB ₁	RF Linear Amplifier up to 175 MHz	2000	0.25	2000	350	0.25	—	300
AB ₁	RF Linear Amplifier (AM Service) up to 175 MHz	2000	0.25	2000	350	0.15	—	65†
AB ₁	AF Amplifier or Modulator	2000	0.25	2000	350	0.50*	—	600*

*Two tubes

†Carrier Power