

The 8973 is a power tetrode designed for very high powered medium frequency or high frequency broadcast service and a very low frequency communication in the half megawatt power range. The 8973 has a thoriated tungsten filament mounted on water-cooled supports. Large diameter coaxial terminals are used for the control grid and the RF filament terminals. Filament power and filament support cooling water connections are made through special couplings with threaded clamping rings.



### CHARACTERISTICS

Plate Dissipation (Max.)	1,000 Kilowatts
Screen Dissipation (Max.)	7.5 Kilowatts
Grid Dissipation (Max.)	2.0 Kilowatts
Frequency for Max. rating (CW)	110 MHz
Amplification Factor	4.5
Filament/Cathode	Thoriated Tungsten
Voltage	16.3 Volts
Current	600 Amps
Capacitance	Grounded Cathode
Input	1000 pf
Output	165 pf
Feedthrough	5.0 pf
Capacitance	N/A
Input	N/A
Output	N/A
Feedthrough	N/A
Cooling	Water and Forced Air
Base	Special Coaxial
Air Socket	N/A
Air Chimney	N/A
Boiler	N/A
Length	18.75 in; 476.20 mm
Diameter	17.03 in; 432.60 mm
Weight	153.0 lb; 69.5 kg

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 (kiloWatts)
C	RF Amplifier	22,500	65.0	21,000	1,500	59.0	2,700	1,025.0
C	RF Amplifier Plate Modulated	17,500	50.0	17,500	800	50.0	2,400	700.0
AB1	RF Linear Amplifier	22,500	110.0	20,000	1,500	45.0	---	610.0
AB1	AF Amplifier or Modulator	22,500	110.0	17,500	1,500	78.0	---	950.0
B	RF Amplifier, Long Pulse, Grounded Grid	1,000	000	24,500	1,750	94.2	7,140	1,770.0

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



**For information** on this and other CPI MPP products, visit our website at: [www.cpii.com](http://www.cpii.com), or contact: CPI Microwave Products Division, Eimac Operation, 607 Hansen Way, Palo Alto, CA 94303  
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