

Communications & Power Industries Tetrode



The 8974 is a power tetrode designed for very high powered frequency or high frequency broadcast service and a very low frequency communication in the megawatt power range. The 8973 has a two-section thoriated tungsten filament mounted on water-cooled supports. The two sections may be fed in quadrature to reduce hum contributed by an arc AC power source. The maximum anode dissipation rating is 1500 kW steady state. 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.

FEATURES:

Maximum plate dissipation:	1500 Kilowatts
Maximum screen dissipation:	15.0 Kilowatts
Maximum grid dissipation:	4.0 Kilowatts
Frequency for max rating (CW):	30 MHz
Amplification factor:	4.5
Filament/cathode:	Thoriated Tungsten
Voltage:	16.3 Volts
Current:	600 Amps
Capacitance: Grounded cathode	
Input:	1600 pF
Output:	250 pF
Feedthrough:	6.0 pF
Capacitance: Grounded grid	
Input:	675 pF
Output:	260 pF
Feedthrough:	1.0 pF
Cooling:	Water and Forced Air
Base:	Special Coaxial
Air Socket:	---
Air Chimney:	---
Boiler:	---
Length:	23.75 in; 60.30 cm
Diameter:	17.03 in; 43.30 cm
Weight:	175.0 lb; 80.0 kg

BENEFITS:

- Worldwide brand name recognition
- Over 85 years technical expertise

APPLICATIONS:

- Communications
- Industrial
- Science

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	125	21,500	1,000	125	7,000	2,158.0
C	RF Amplifier Plate Modulated	17,500	100	17,500	1,000	95.0	6,465	1,384.0
AB1	RF Linear Amplifier	22,500	125	20,000	1,500	86.5	---	1,225.0
AB1	AF Amplifier or Modulator	22,500	125	17,500	1,500	146	---	2,015.0

With a history of producing high quality products, we can help you with your tetrode.

Contact us at MPPMarketing@cpii.com or call us at +1 650-846-2800. The data should be used for basic information only.

Formal, controlled specifications may be obtained from CPI for use in equipment design.



**Microwave Power
Products Division**
811 Hansen Way
Palo Alto, California
USA 94304

tel +1 650-846-2800
fax +1 650-856-0705
email MPPMarketing@cpii.com
web www.cpii.com/MPP

For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

©2020 Communications & Power Industries LLC.
Company proprietary: use and reproduction is strictly prohibited without written authorization from CPI.