

## Communications & Power Industries Triode



The 3CX3000A7 high-mu forced-air cooled power triode provides relatively high power output as an amplifier, oscillator or modulator at low plate voltages. The tube has a low inductance cylindrical filament tank circuit for VHF operation. Operation with zero grid bias in many applications offers circuit simplicity by eliminating the bias supply. Grounded-grid operation is attractive since a power gain of over twenty times can be obtained.

### FEATURES:

|                                |                    |
|--------------------------------|--------------------|
| Maximum plate dissipation:     | 4,000 Watts        |
| Maximum screen dissipation:    | ---                |
| Maximum grid dissipation:      | 225 Watts          |
| Frequency for max rating (CW): | 110 MHz            |
| Amplification factor:          | 160                |
| Filament/cathode:              | Thoriated Tungsten |
| Voltage:                       | 7.5 Volts          |
| Current:                       | 51.5 Amps          |
| Capacitance: Grounded cathode  |                    |
| Input:                         | 38.0 pF            |
| Output:                        | 0.6 pF             |
| Feedthrough:                   | 24.0 pF            |
| Capacitance: Grounded grid     |                    |
| Input:                         | 38.0 pF            |
| Output:                        | 24.0 pF            |
| Feedthrough:                   | 0.6 pF             |
| Cooling:                       | Forced Air         |
| Base:                          | Special, Coaxial   |
| Air Socket:                    | ---                |
| Air Chimney:                   | ---                |
| Boiler:                        | ---                |
| Length:                        | 9.0 in; 228.60 mm  |
| Diameter:                      | 4.15 in; 105.50 mm |
| Weight:                        | 6.2 lb; 2.8 kg     |

### BENEFITS:

- Worldwide brand name recognition
- Over 85 years technical expertise

### APPLICATIONS:

- Communications
- Industrial

| 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                  | Cathode driven RF amplifier                          | 5,000                 | 2.5                  | 4,800                 | ---                    | 1.5                  | 435                 | 5.5                      |
| AB2                | Cathode driven RF linear amplifier                   | 5,000                 | 2.5                  | 4,800                 | ---                    | 2.0                  | 410                 | 7.26                     |
| AB2                | Grid driven RF amplifier linear amplifier AM service | 5,000                 | 2.5                  | 4,000                 | ---                    | 0.74                 | 115                 | 1.13                     |
| AB2                | Grid driven AF amplifier or modulator                | 5,000                 | 2.5                  | 4,000                 | ---                    | 3.6                  | 115                 | 10.5                     |

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

Contact us at [MPPMarketing@cpii.com](mailto: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](mailto:MPPMarketing@cpii.com)  
web [www.cpii.com/MPP](http://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.