

## Communications & Power Industries Triode



The 3CW20,000A7 is a high- $\mu$  power triode intended for use as a zero bias Class B amplifier in audio or RF applications. Operation with zero-grid bias offers circuit simplicity by eliminating the bias supply. In addition, grounded grid operation is attractive since a power gain as high as twenty times can be obtained. The 3CW20,000A7 is electrically identical to the air-cooled 3CX10,000A7 except for its 20 kW plate dissipation rating.

### FEATURES:

|                                |                      |
|--------------------------------|----------------------|
| Maximum plate dissipation:     | 20,000 Watts         |
| Maximum screen dissipation:    | ---                  |
| Maximum grid dissipation:      | 500 Watts            |
| Frequency for max rating (CW): | 110 MHz              |
| Amplification factor:          | 200                  |
| Filament/cathode:              | Thoriated Tungsten   |
| Voltage:                       | 7.5 Volts            |
| Current:                       | 99.0 Amps            |
| Capacitance: Grounded cathode  |                      |
| Input:                         | 59.0 pF              |
| Output:                        | 0.2 pF               |
| Feedthrough:                   | 36.0 pF              |
| Capacitance: Grounded grid     |                      |
| Input:                         | 59.0 pF              |
| Output:                        | 36.0 pF              |
| Feedthrough:                   | 0.2 pF               |
| Cooling:                       | Water and Forced Air |
| Base:                          | Coaxial              |
| Air Socket:                    | SK-1300              |
| Air Chimney:                   | ---                  |
| Boiler:                        | ---                  |
| Length:                        | 11.22 in; 285.00 mm  |
| Diameter:                      | 4.65 in; 118.10 mm   |
| Weight:                        | 11.5 lb; 5.2 kg      |

### BENEFITS:

- Worldwide brand name recognition
- Over 85 years technical expertise

### APPLICATIONS:

- Industrial
- Medical

| 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                  | Grid driven RF amplifier                 | 7,000                 | 4.0                  | 7,000                 | ---                    | 4.0                  | 530                 | 21.3                     |
| C                  | Grid driven RF amplifier plate modulated | 5,500                 | 3.0                  | 5,000                 | ---                    | 3.0                  | 380                 | 11.9                     |
| B                  | Cathode driven RF linear amplifier       | 7,000                 | 5.0                  | 7,000                 | ---                    | 5.0                  | 1,540               | 24.2                     |
| B                  | Cathode driven RF linear amplifier       | 7,000                 | 5.0                  | 7,000                 | ---                    | 2.4                  | 330                 | 5.65                     |

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.



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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.

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