3CW2500C7 / YU-157

The 3CW2500C7/YU-157 is a rugged coaxial base power triode designed for use as a cathode driven Class AB2 or Class C amplifier. It is recommended for VHF or UHF service as a linear amplifier, power amplifier, or pulse amplifier. Linearity and power gain are both excellent due to the low ratio of grid to plate current, and the relatively high amplification factor. Low grid interception of available emission current is due to the beam forming geometry of the special grid and cathode design.

CHARACTERISTICS
Plate Dissipation (Max.)
Screen Dissipation (Max.)
Grid Dissipation (Max.)
Frequency for Max. rating (CW)
Amplification Factor
Filament/Cathode
Voltage
Current
Capacitance
Input
Output $\quad 12.4 \mathrm{pf}$
Feedthrough $\quad 0.14 \mathrm{pf}$
Capacitance N/A
Input N/A
Output N/A
Feedthrough N/A
Cooling Liquid
Base
Air Socket N/A
Air Chimney N/A
Boiler
Length
Diameter
Weight

2,500 Watts
N/A
20 Watts
500 MHz
125
Oxide Cathode
5.0 Volts
10.5 Amps

Grounded Grid
35.5 pf

Coaxial

N/A
$3.68 \mathrm{in} ; 9.34 \mathrm{~cm}$
$2.25 \mathrm{in} ; 5.72 \mathrm{~cm}$
$1.34 \mathrm{lb} ; 0.6 \mathrm{~kg}$

|  |  | MAXIMUM RATINGS |  | TYPICAL OPERATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class of Operation | Type of Service | Plate Voltage (Volts) | Plate Current (Amps) | Plate Voltage (Volts) | Screen <br> Voltage <br> (Volts) | Plate Current (Amps) | Drive Power (Watts) | Output Power (kiloWatts) |
| $\underset{\mathrm{AB}}{\mathrm{C}}$ | Cathode Driven RF Amplifier at 400 MHz Cathode Driven RF Linear Amplifier up to $\mathbf{3 0} \mathbf{~ M H z}$ | $\begin{aligned} & 4,000 \\ & 4,000 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 1.0 \end{aligned}$ | $\begin{aligned} & 3,000 \\ & 3,500 \end{aligned}$ | --- | $\begin{gathered} 1.0 \\ 0.97 \end{gathered}$ | $\begin{aligned} & 83 \\ & 50 \end{aligned}$ | $\begin{aligned} & 1.57 \\ & 2.03 \end{aligned}$ |

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,
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