

Central **ELECTRONIC** MANUFACTURERS

DENVILLE, NEW JERSEY

**PULSE
MODULATOR
TRIODE
TYPE
4C28**

6.5 Kilowatts

PULSE MODULATOR TRIODE

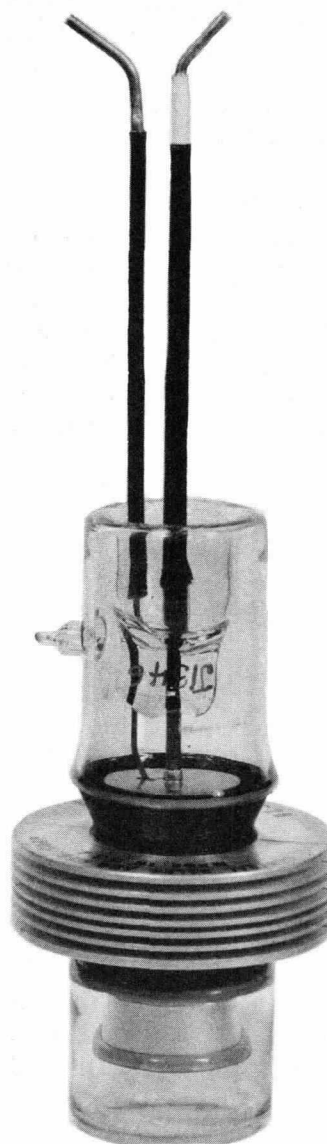
DESCRIPTION

The 4C28 is a physically small transmitting triode for use in small loran and shoran; radar, and other types of pulse transmitters. This forced air cooled tube features an oxide coated, unipotential cathode, light weight at high power output and may be used either as a final or a driver for larger tubes.

SPECIFICATIONS **PHYSICAL**

Overall Length 3 $\frac{7}{8}$ inches
Overall Diameter 2 inches
Weight 6 ounces
Mounting Position Vertical
Type of Cooling Forced air
Required Air Flow on Anode . . . (NOTE 1)
Maximum Incoming Air Temperature . . 45°C
Maximum Glass Seal Temperature . . 180°C

NOTE 1 — For an anode dissipation of 150 watts, an air blast of at least 5 cfm should be directed upon the anode cooling fins and a blast of 1 cfm on the grid seal and lead.



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ELECTRICAL

Filament Oxide coated unipotential cathode
Filament Voltage 6.0 Volts
Filament Current 6.5 Amperes
Filament Starting Surge
Current 13.0 Amperes
Filament Cold Resistance 0.071 Ohms
Amplification factor 22

$E_c = -23$ Volts DC
 $E_b = 500$ Volts DC

Interelectrode Capacitances

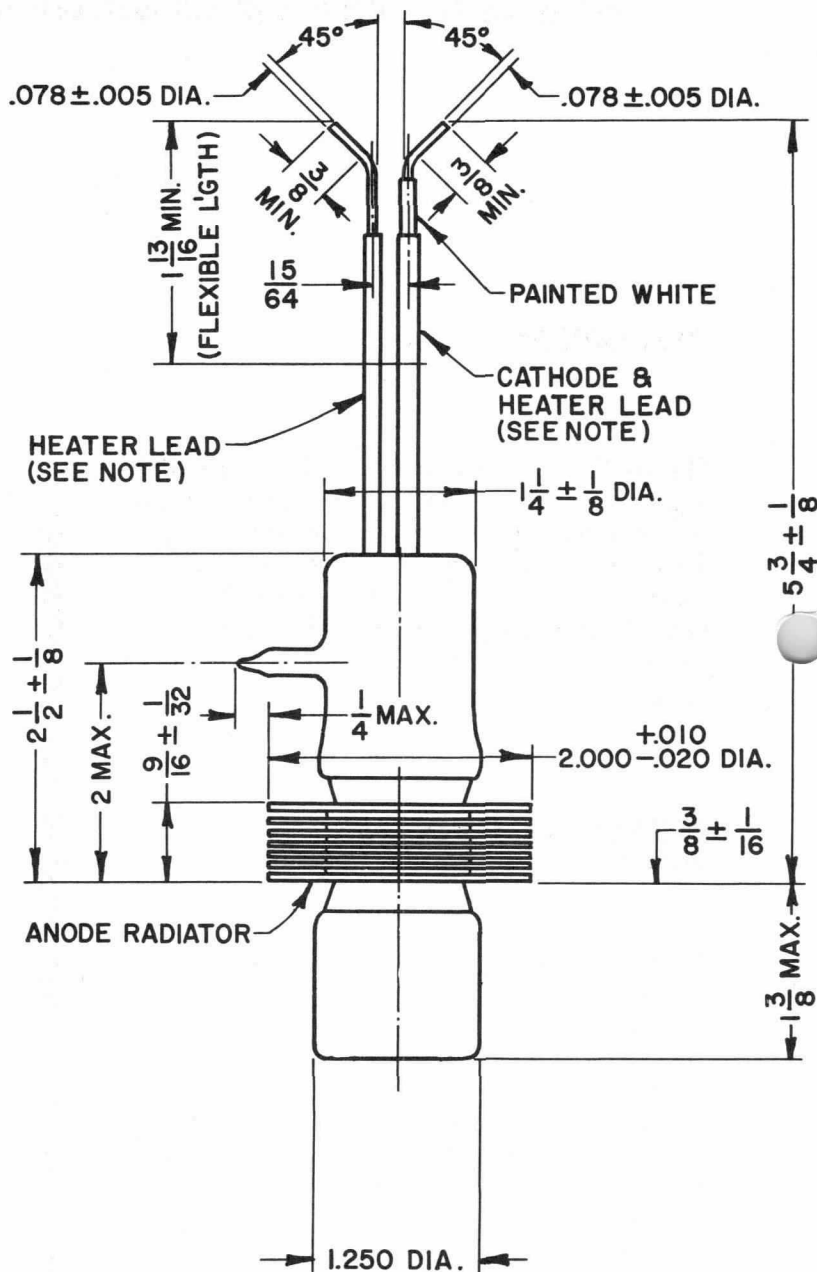
Grid to Anode 6.9 uuf
Grid to Filament 10.0 uuf
Anode to Filament 2.0 uuf
Cathode Warm-up Time 3 Min.
Peak Cathode Current 2.7 Amperes
Peak Inverse Voltage 8.0 Kilovolts DC
Peak Anode Current 2.0 Amperes

TYPICAL OPERATION (PULSE)

DC Anode Voltage 4.2 Kilovolts DC
DC Grid Voltage -700 Volts DC
Peak Power Output 6.5 Kilowatts
Duty 0.0005

MAXIMUM RATINGS

DC Anode Voltage 7.5 Kilovolts
DC Grid Voltage -750 Volts
DC Anode Current 2.0 Amperes
Maximum Duty 0.0012
Peak Anode Current 2.0 Amperes
Peak Cathode Current 2.7 Amperes
Peak Anode Voltage 8.0 Kilovolts
Peak Power Output 6.5 Kilowatts



NOTE: LEAD INSULATED WITH BRAIDED FIBRE GLASS TUBING.



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