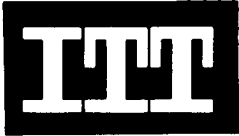


engineering TUBE DATA

F-7012
POWER
TRIODE



Components Division

DESCRIPTION

The F-7012 is a triode designed for use in high voltage pulse operation. The anode is forced air cooled, capable of dissipating 2.5 kilowatts during Continuous Commercial Service.

ELECTRICAL

Filament Voltage	15 volts
Filament Current	36 amperes
Filament Starting	72 amperes
Amplification Factor	
$E_c = -200 \text{ v.}, I_b = .2 \text{ amps}$	25
Direct Inter-electrode Capacitance	
Grid-Plate	14.2 μmf
Grid-Filament	16.3 μmf
Plate-Filament	1.9 μmf

MECHANICAL

Mounting Position	Vertical, Anode Down		
Type of Cooling	Forced Air		
Anode Air Flow Required			
Plate Dissipation - kilowatts	2.5	2.0	1.5
Air Flow - cfm	150	120	90
Pressure - inches of water	2.5	1.6	.9
Maximum Incoming Air Temperature			45° C.
Maximum Glass Temperature			180° C.
Net Weight Approximate			5-1/2 pounds

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

R-F Power Amplifier and Oscillator - Pulsed Operation

Maximum Ratings, Absolute Values

D-C Plate Voltage	17.5 kilovolts, max.
D-C Grid Voltage	-5.0 kilovolts, max.
Peak Cathode Current	40 amperes, max.
Duty Cycle	.030 maximum
Plate Dissipation†	1.2 kilowatts

† Air Flow - 75 cfm

412

ITT COMPONENTS DIVISION
INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION

P. O. BOX 412, CLIFTON, NEW JERSEY

F-7012
POWER
TRIODE

-2-

Typical Operation

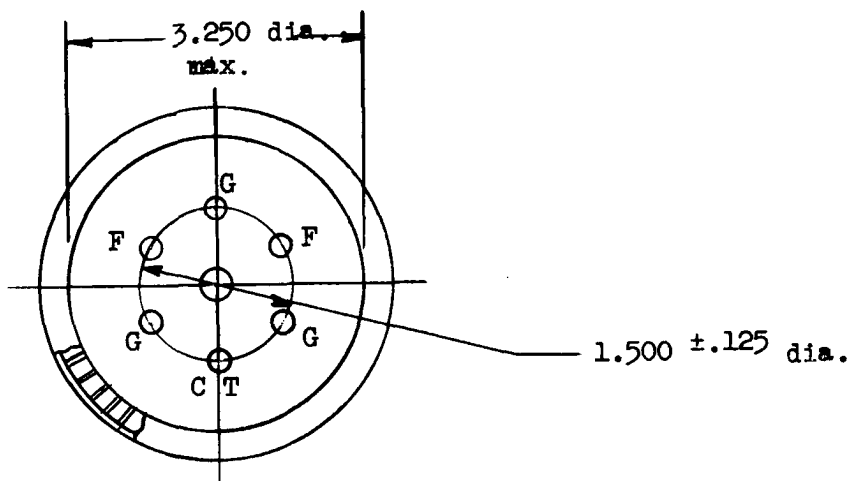
D-C Plate Voltage	15,500 volts
D-C Grid Voltage (during pulse)	-750 volts
D-C Plate Current	0.20 amperes
D-C Grid Current	.013 amperes
Duty Cycle	.023
Power Output, approximate	90 kilowatts

COLOR CODE

Fil. Term. -- Yellow

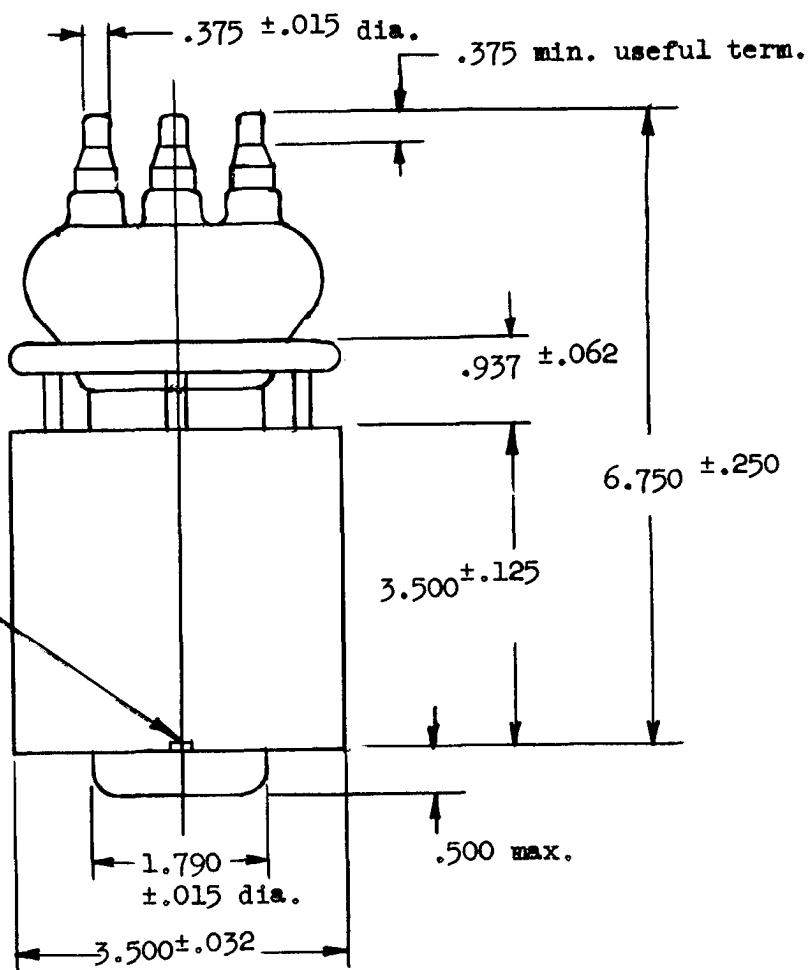
Fil. C. Term. - Red

Grid ----- Black



Keyway to be centered within 5° on same line as fil. center tap.

NOTE: Tubulation tip off to be 1/8 min. below terminals.



OUTLINE
F-7012 POWER TRIODE