

OBJECTIVE FOR DEVELOPMENTAL TYPE

Y-1032*

PLANAR TRIODE

The Y-1032 is a medium-mu triode of ceramic and metal planar construction primarily intended for radio-frequency amplifier service well into the UHF range. A feature of the tube is its operation at low values of plate voltage.

GENERAL

Electrical

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC+	6.3±0.3	Volts
Heater Current‡	0.24	Amperes

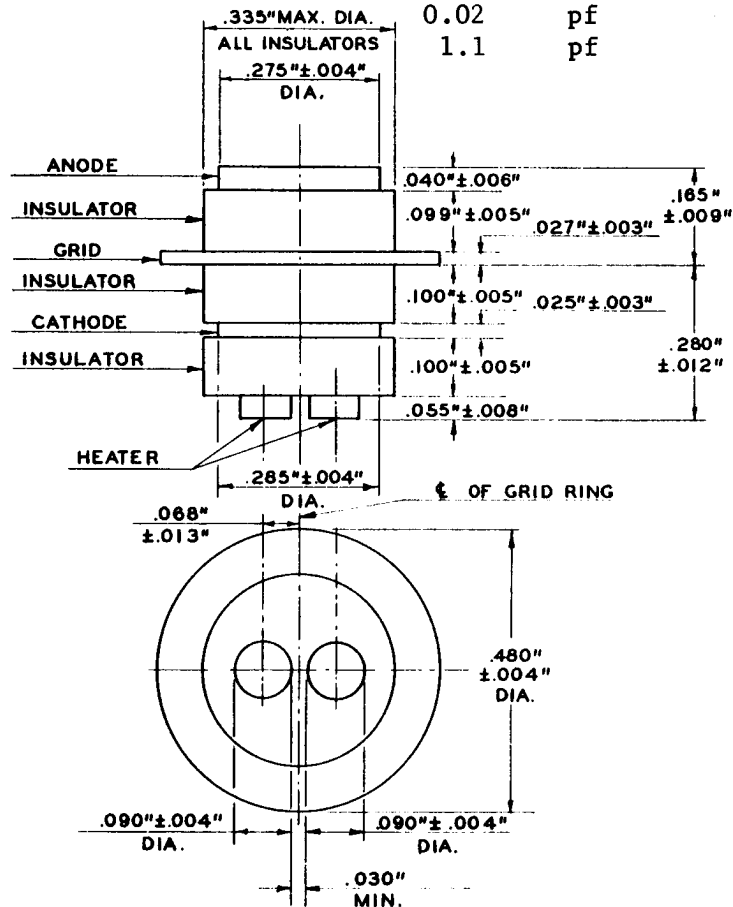
→ Direct Interelectrode Capacitances

Grid to Plate	1.4	pf
Input	1.7	pf
Output	0.02	pf
Heater to Cathode	1.1	pf

Mechanical

Operating Position - Any

→ Outline Drawing



MAXIMUM RATINGS

Absolute-Maximum Values

Plate Voltage	60	Volts
Positive DC Grid Voltage	0	Volts
Plate Dissipation	0.6	Watts
DC Cathode Current	10	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	50	Volts
Heater Negative with Respect to Cathode	50	Volts
→ Grid Circuit Resistance	0.01	Megohms
→ Envelope Temperature at Hottest Point	250	C

Absolute-Maximum ratings are limiting values of operating and environmental conditions applicable to any electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making no allowance for equipment variations, environmental variations, and the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration and of

all other electron devices in the equipment.

The equipment manufacturer should design so that initially and throughout life no absolute-maximum value for the intended service is exceeded with any tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of the tube under consideration and of all other electron devices in the equipment.

CHARACTERISTICS AND TYPICAL OPERATION

Average Characteristics

Plate Voltage	50	26.5	Volts
Cathode-Bias Resistor	68	33	Ohms
Amplification Factor	37	36	
Plate Resistance, approximate	3400	3600	Ohms
Transconductance	11000	10000	Micromhos
Plate Current	7.5	4.7	Milliamperes

Typical Operation

Grounded-Grid Amplifier - 450 Megacycles

Plate Voltage	26.5	Volts
Cathode-Bias Resistor	33	Ohms
Plate Current	4.7	Milliamperes
Bandwidth, approximate	7.5	Megacycles
Power Gain, approximate (Measured with power-matched input)	11	Decibels
Noise Figure (Measured with noise-matched input, using argon lamp noise source), approximate	5.4	Decibels

* Publication of these data does not obligate the General Electric Company to manufacture a tube with these characteristics.

+ The equipment designer should design the equipment so that the heater voltage is centered at the specified bogey value, with heater supply variations restricted to maintain heater voltage within the specified tolerance.

‡ Heater current of a bogey tube at $E_f = 6.3$ volts.