

OBJECTIVE FOR DEVELOPMENTAL TYPE

Y-1012*

DIODE

The Y-1012 is a cathode-type diode of ceramic-and-metal planar construction intended for computer service.

GENERAL

Electrical

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC+

6.3±0.3 Volts

Heater Current‡

0.215 Amperes

Direct Interelectrode Capacitances§

→ Plate to Cathode: (p to k)

1.3 pf

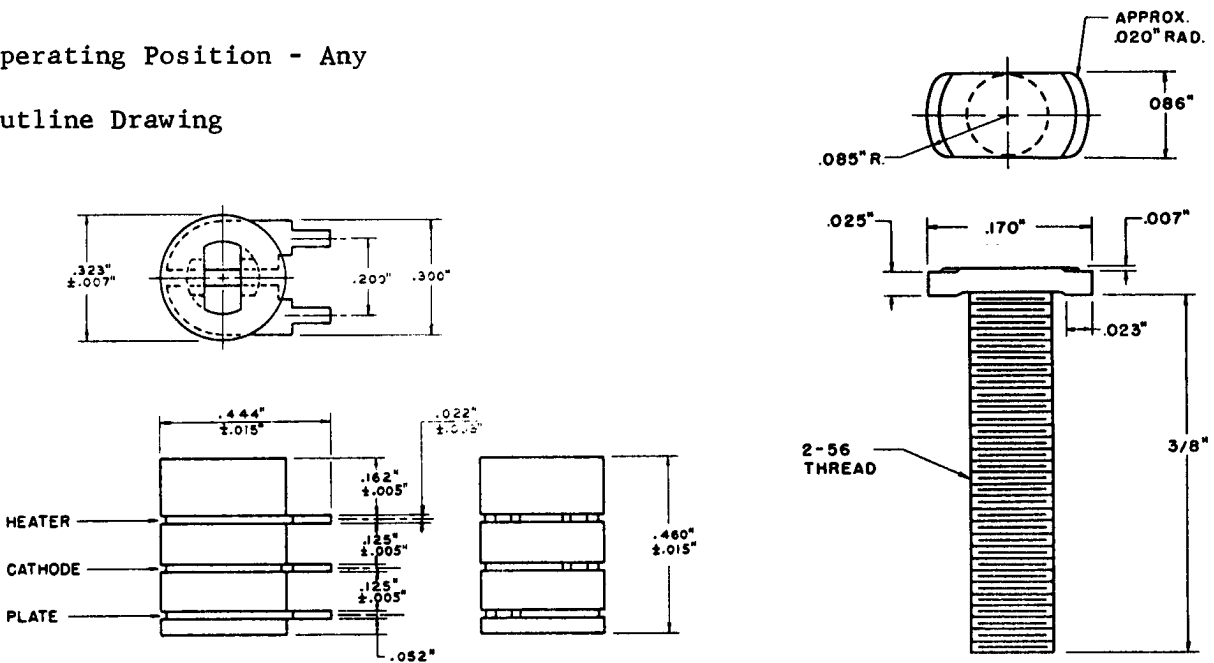
→ Heater to Cathode

1.5 pf

Mechanical

Operating Position - Any

→ Outline Drawing



MAXIMUM RATINGS**Absolute-Maximum Values**

Peak Inverse Plate Voltage	350	Volts
Steady-State Peak Plate Current	20	Milliamperes
DC Output Current	5.0	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	50	Volts
Heater Negative with Respect to Cathode	50	Volts
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 service-ability 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.

AVERAGE CHARACTERISTICS

Tube Voltage Drop		
I _b = 5.0 Milliamperes DC	2.6	Volts

- * 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 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.
- § Without external shield.
- ¶ One method of mounting the Y-1012 is to use a stainless-steel "T" bolt (see drawing) to attach the mounting base of the tube to a chassis or circuit board. The "T" bolt should be inserted in the slot in the base of the tube, turned 90 degrees, and attached to the chassis or circuit board with a 2-56 nut and lock washer. Torque used to tighten the nut should not exceed 3 inch-pounds.
- # Operation below the rated maximum envelope temperature is recommended for applications requiring the longest possible tube life.