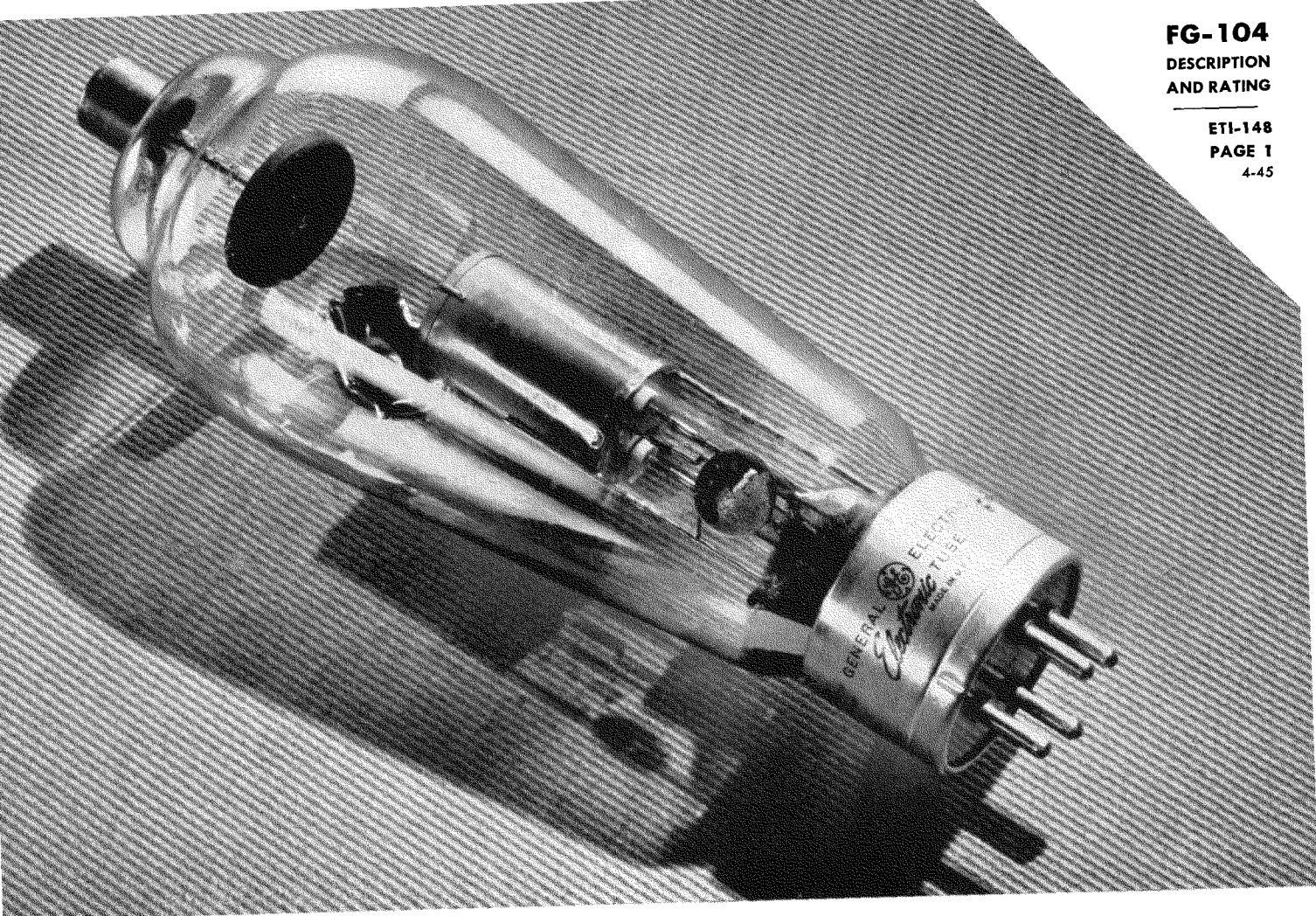




PHANOTRON

DESCRIPTION

The FG-104 is a half-wave, mercury-vapor rectifier for converting alternating current to direct current. It is suitable for applications where rectification of higher currents at lower frequencies and voltages is desired than is possible with high-vacuum

tubes. In comparison with high-vacuum tubes, the FG-104 has a low and constant voltage drop which is an advantage in low-voltage rectifier applications since it allows more efficient utilization of power and results in lower circuit losses.

TECHNICAL INFORMATION

These data are for reference only. For design information refer to specifications.

GENERAL CHARACTERISTICS

Number of electrodes.....	2
Electrical	
Cathode—Indirectly heated type	
Heater voltage.....	5.0 volts
Heater current, approx.....	10.0 amperes
Heating time, typical.....	5 minutes
Peak voltage drop, typical.....	15 volts
Mechanical	
Net weight, approx.....	12 ounces
Shipping weight, approx.....	3 pounds
Mounting position.....	vertical, with base down

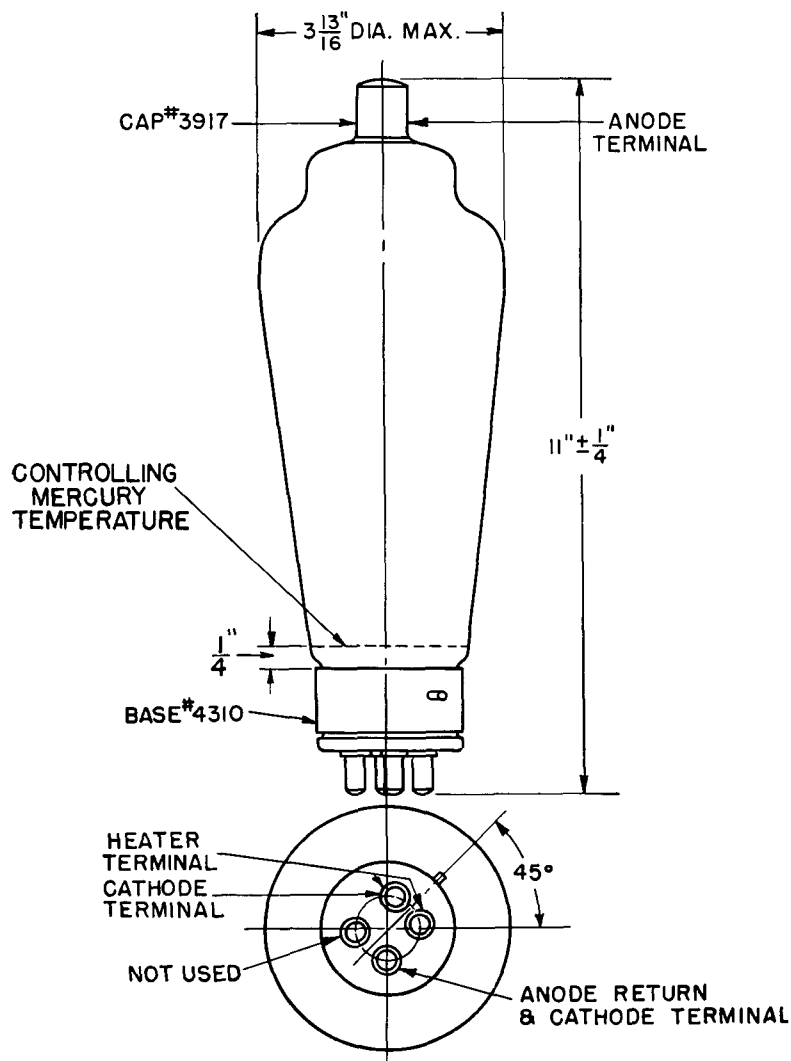
GENERAL  ELECTRIC


Electronic
TUBE

TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS

	Continuous Service	Welder-Control Service
Maximum peak inverse anode voltage.....	3000	10,000 volts
Maximum anode current		
Instantaneous		
25 cycles and above.....	40	16 amperes
Below 25 cycles.....	12.8	8 amperes
Average anode current.....	6.4	4 amperes
Surge anode current, for design only.....	200	80 amperes
Duration of surge current.....	0.1	0.1 seconds
Maximum time of averaging current.....	15	15 seconds
Temperature limits, condensed mercury.....	+40 +80	+25 +50 centigrade
Recommended temperature, condensed mercury.....	40	40 centigrade



K-4955993

8-5-44

OUTLINE FG-104

Electronics Department
GENERAL ELECTRIC
Schenectady, N. Y.