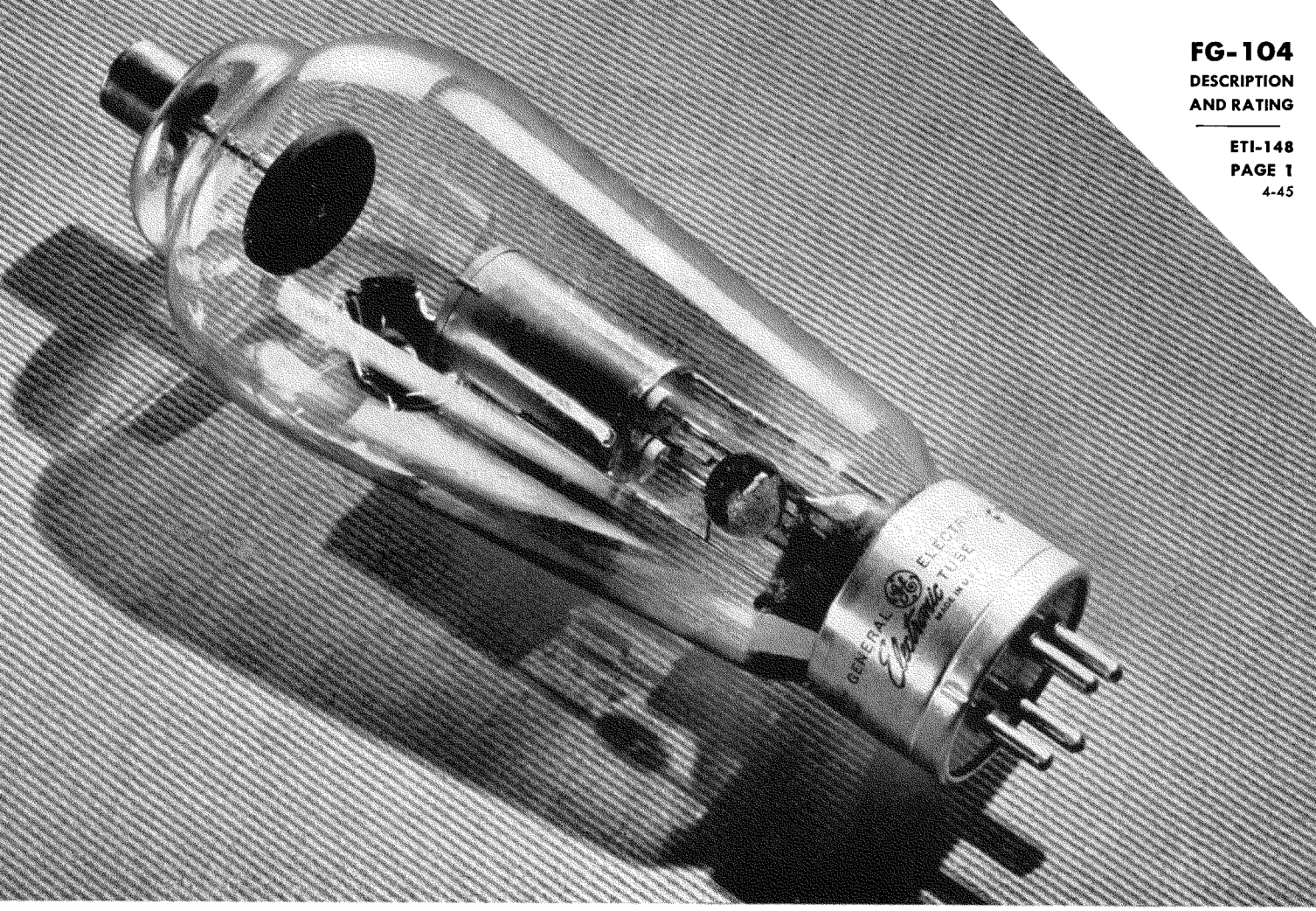


PHANOTRON

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	

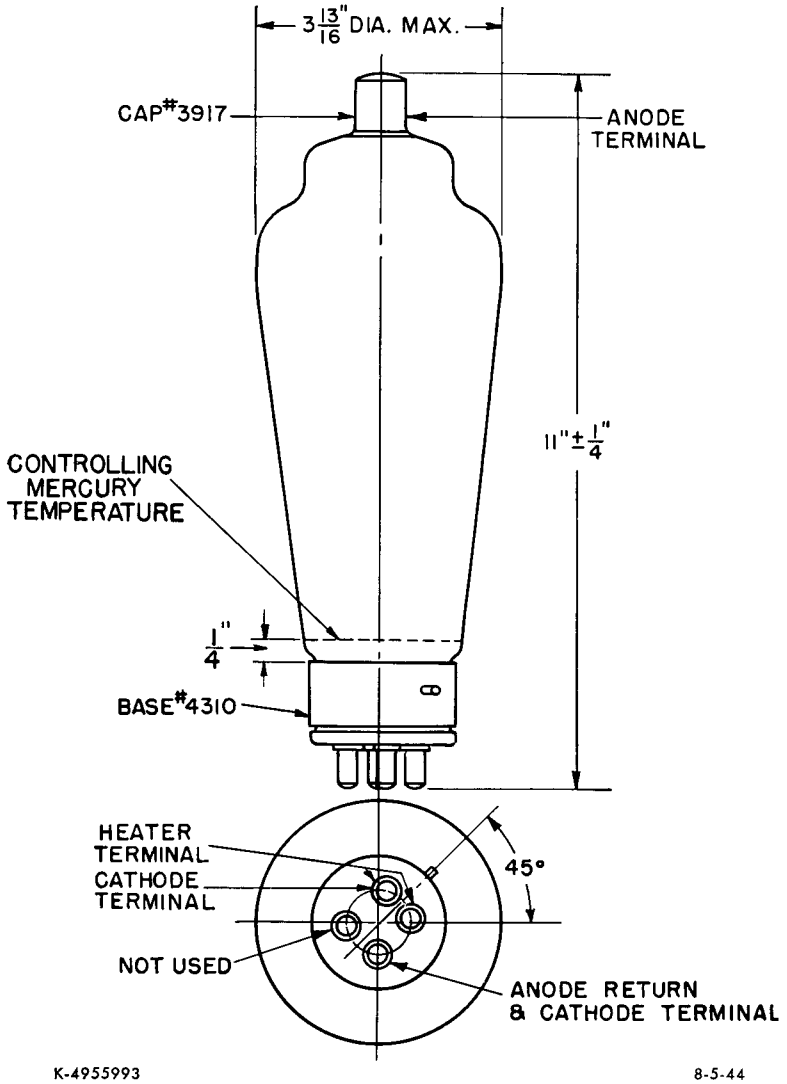
GE Electronic TUBE

GENERAL ELECTRIC

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



OUTLINE FG-104

Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.