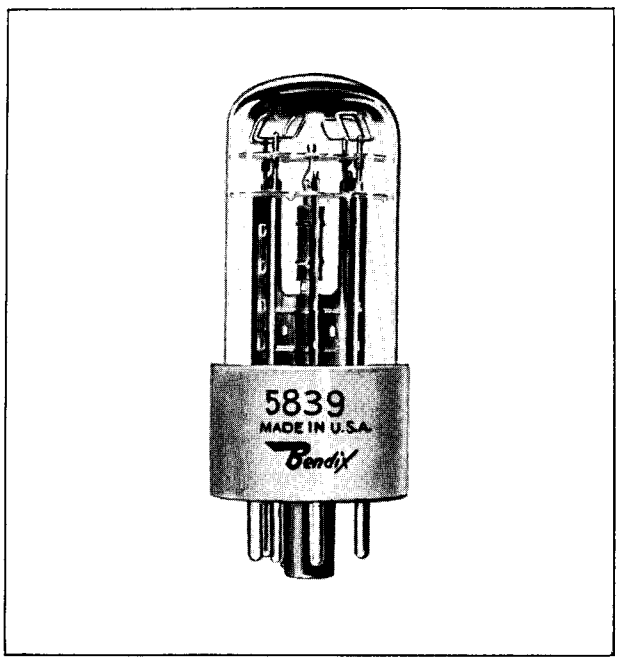
File Catalog: Electron Tube Products
Section: Receiving Tubes

5839
5838
5852

Bendix Types { TE-2, TE-3, TE-5

(Generic Type 6X5)

FULL-WAVE RECTIFIERS



DESCRIPTION

These full-wave, high-vacuum rectifiers are from the Bendix Red Bank line of reliable vacuum tubes specifically designed for aircraft and industrial applications where freedom from early failures, long average service life, and uniform operating characteristics are extremely important. Each tube is given a 45-hour run-in under various overload, vibration and shock conditions likely to be encountered in service. This run-in serves to reduce early failures by eliminating tubes with any minor defects that might lead to failure under actual operating conditions. The three tubes covered on this sheet are identical with the exception of the filament ratings.

The heavy-gage heater construction, together with a pure alumina insulator, permits operation at high heater cathode voltages. The large area cathode operating at moderate temperatures gives long service life and freedom from arc-overs. The eight-pillar mount structure and the button-type stem provide a strong assembly that will stand up under extreme conditions of vibration and shock. The tube requires an 8-pin octal socket and can be mounted in any position. Adequate ventilation should be provided.

RATINGS*

Heater voltage and current**

†JAN 5839 (R.B. Type TE-2)..... 26.5 volts, 0.255 amps.
5838 (R.B. Type TE-3)..... 12.6 volts, 0.6 amps.
JAN 5852 (R.B. Type TE-5)..... 6.3 volts, 1.2 amps.

†Illustrated above.

Peak inverse voltage	1375 volts (max.)
Peak plate current—(per plate)	230 mA (max.)
DC heater-cathode potential	450 volts (max.)
Cathode heating time	45 sec.
Total effective plate supply impedance—per plate	150 ohms (min.)

For maximum current and voltage ratings, refer to the graph at right.

* To obtain greatest life expectancy from tube, avoid designs where the tube is subjected to all maximum ratings simultaneously.

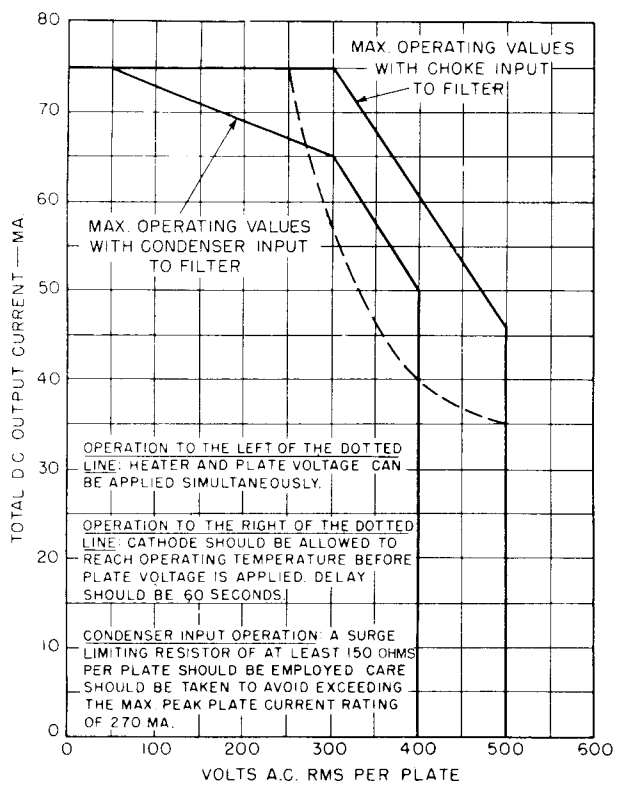
** Voltage should not fluctuate more than ± 5%.

PHYSICAL CHARACTERISTICS

Base	Intermediate shell octal 6-pin (Melamine—with barriers)
Bulb	T-9
Max. overall length	3.320 in.
Max. seated height	2.820 in.
Max. diameter	1.380 in.
Mounting position	Any
Max. altitude***	80,000 ft.
Max. bulb temperature	160°C.

***See chart on reverse side.

RATING CHART



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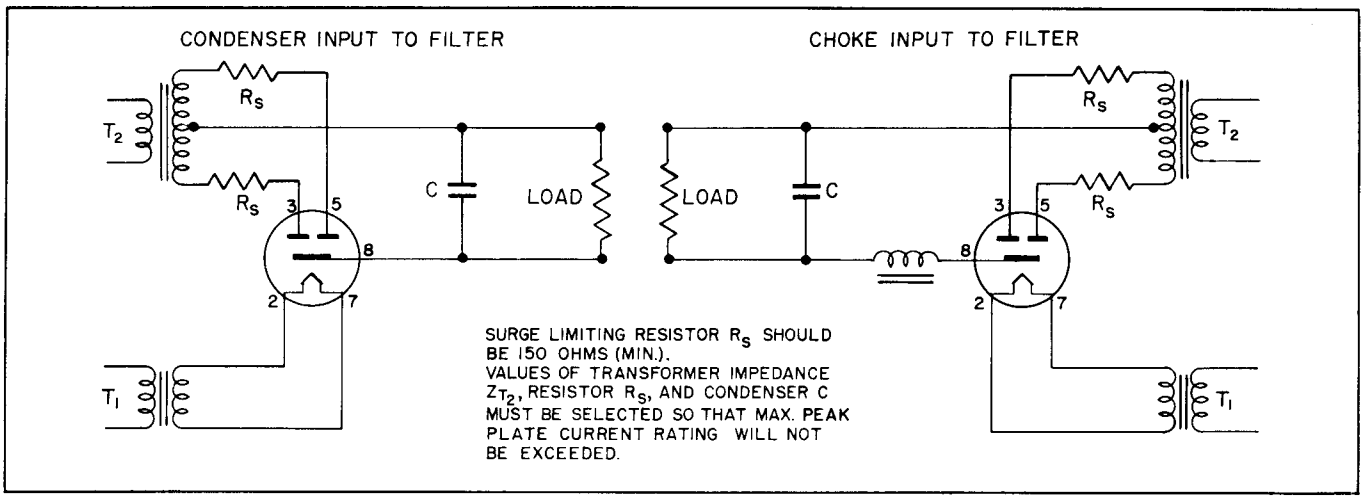
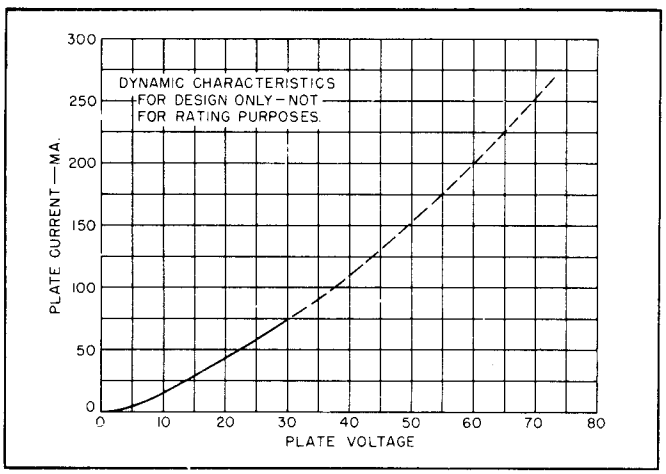
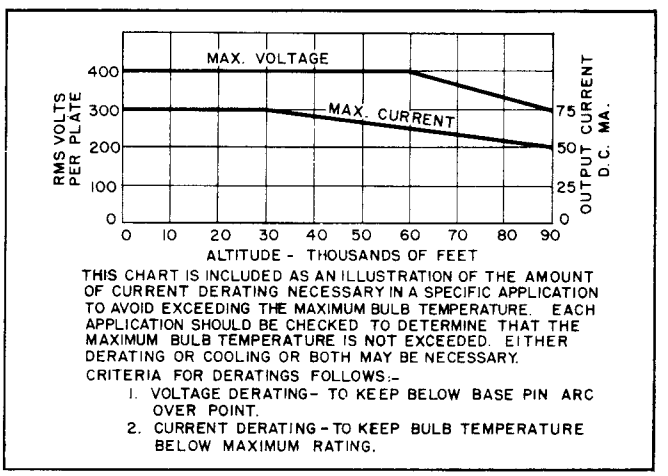


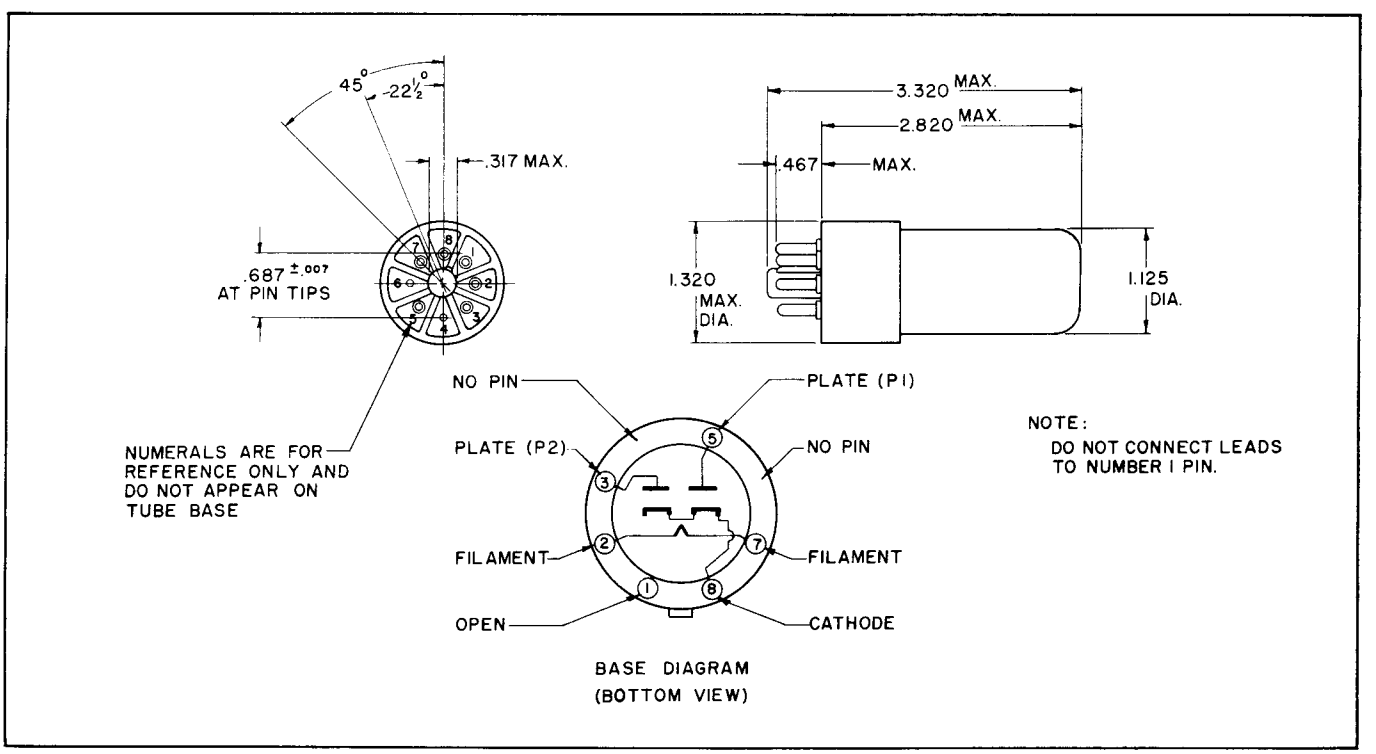
APPLICATION OF FULL-WAVE RECTIFIER



AVERAGE PLATE CHARACTERISTICS



ALTITUDE RATINGS



OUTLINE DRAWING