AMPEREX TUBE TYPE 5AR4/GZ34

The 5AR4/GZ34 is a high vacuum, full-wave rectifier capable of output currents up to 250 milliamperes. The indirectly heated cathode is connected directly to the heater. Its small size and generous ratings make it particularly suitable for application in new, compact Hi-Fi component designs.

GENERAL CHARACTERISTICS

ELECTRICAL

Heater	Indirectly heated cathode, coated unipotential
Heater Voltage (A.C.)	5.0 volts
Heater Current	1.9 amps

MECHANICAL

Base	Octal, 5 pin
Maximum Overall Length	3 25/64 inches
Maximum Diameter	1½ inches

MAXIMUM RATINGS (DESIGN CENTER VALUES)

Maximum Peak Inverse Voltage	1500 volts
Maximum Peak Current (per plate)	750 Ma
A.C. Supply (plate-to-plate) Voltage (rms)	1100 volts
Maximum D.C. Output Current	250 Ma
Maximum Capacity (condenser input filter)	60 μf

Typical Operating Conditions
Condenser Input Filter

A.C. Supply Voltage (plate to plate) (rms)	2x300	2x350	2x400	2x450	2x500	2x550 volts
Limiting Resistor [2] (minimum)	75	100	125	150	175	200 ohms ←
D.C. Output Current	250	250	250	250	200	160 Ma
D.C. Output Voltage [3]	330	380	430	480	560	640 volts ←

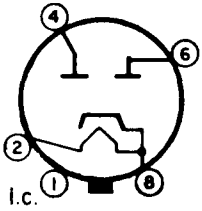
Choke Input Filter

A.C. Supply Voltage (plate to plate) (rms)	2x300	2x350	2x400	2x450	2x500	2x550 volts
Inductance	10	10	10	10	10	10 henries
Limiting Resistor	0	0	0	0	0	0 ohms
D.C. Output Current	250	250	250	250	250	225 mA
D.C. Output Voltage [3]	250	290	330	375	420	465 volts ←

[2] Per Plate

[3] At maximum values

5AR4/GZ34


4
6
2
1
8
I.C.

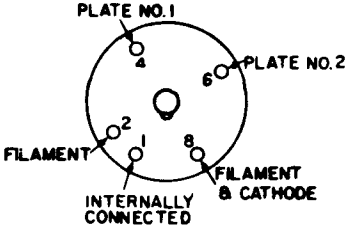
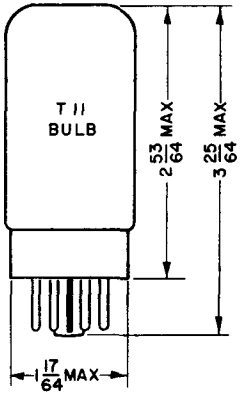
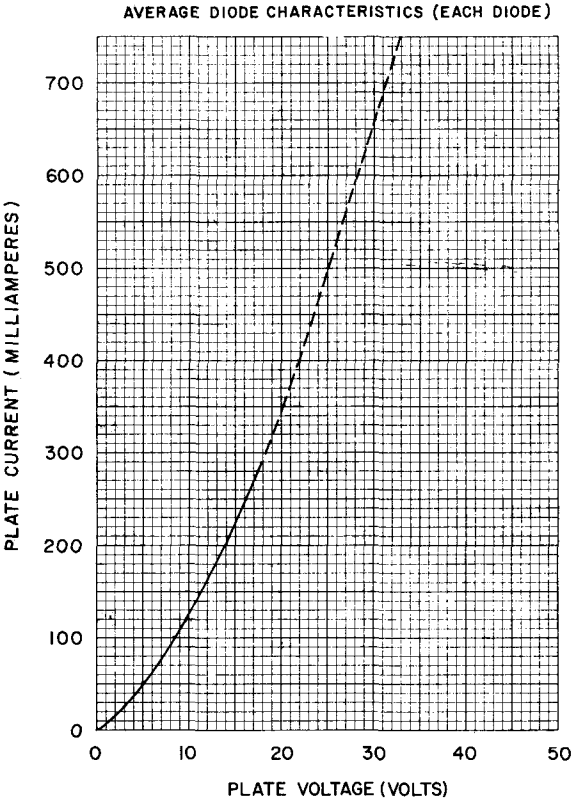
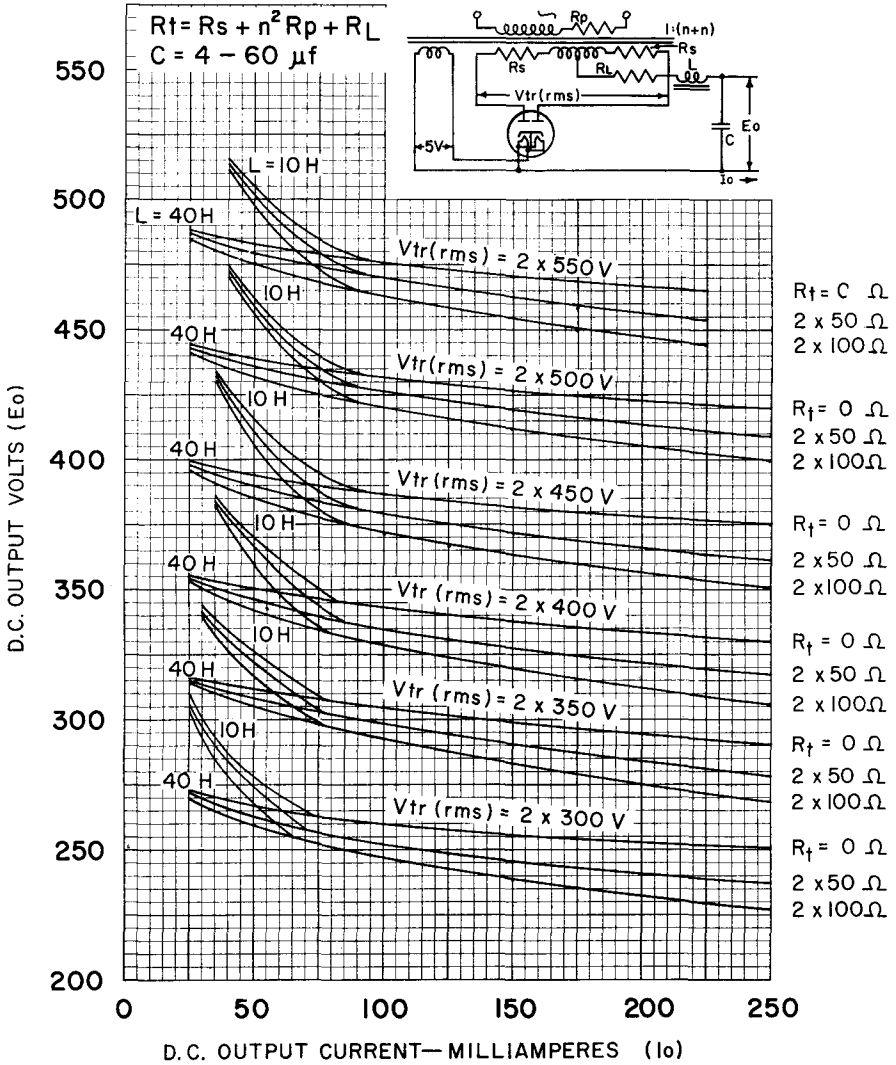


PLATE NO. 1
4
6
PLATE NO. 2
2
1
8
FILAMENT
FILAMENT & CATHODE
INTERNALLY CONNECTED


T 11
BULB
2 53/64 MAX
3 25/64 MAX
1 17/64 MAX

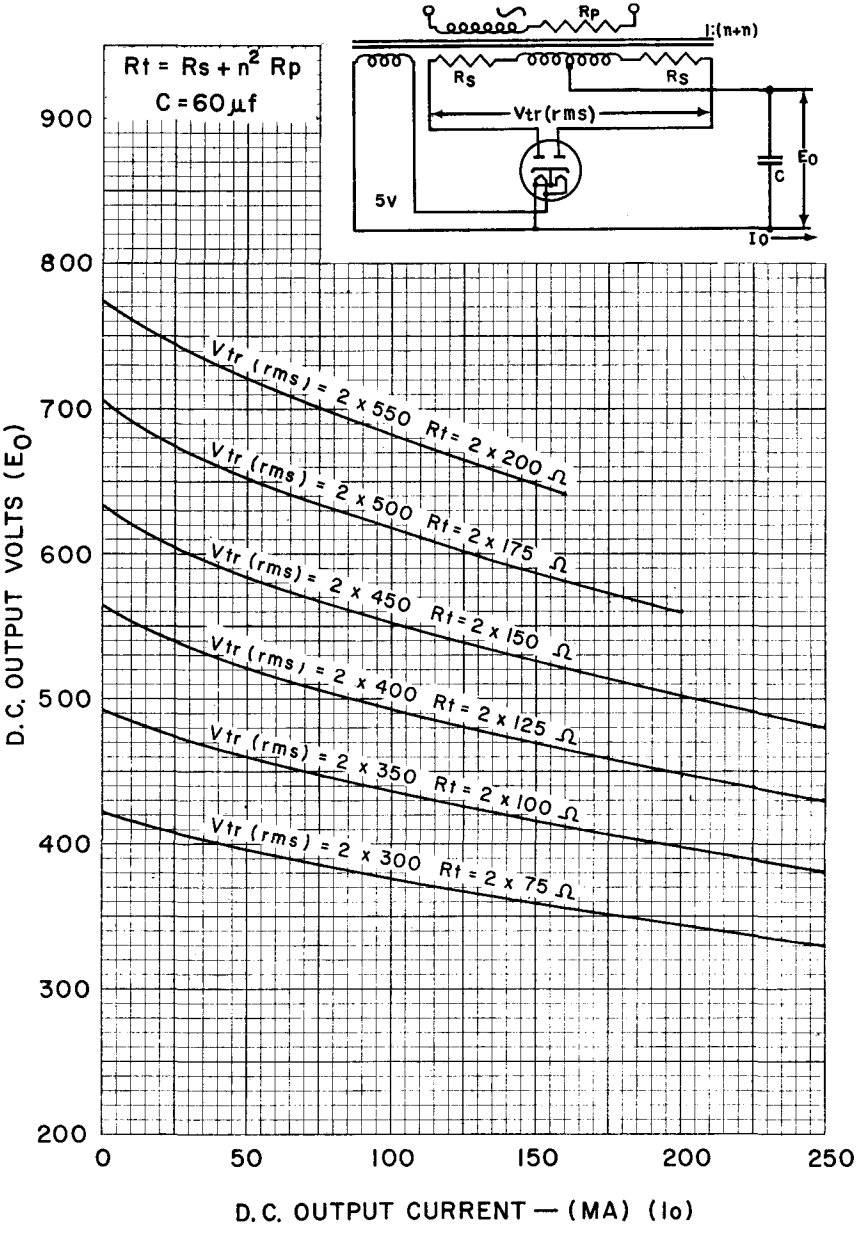

AVERAGE DIODE CHARACTERISTICS (EACH DIODE)
PLATE CURRENT (MILLIAMPERES)
700
600
500
400
300
200
100
0
0
10
20
30
40
50
PLATE VOLTAGE (VOLTS)

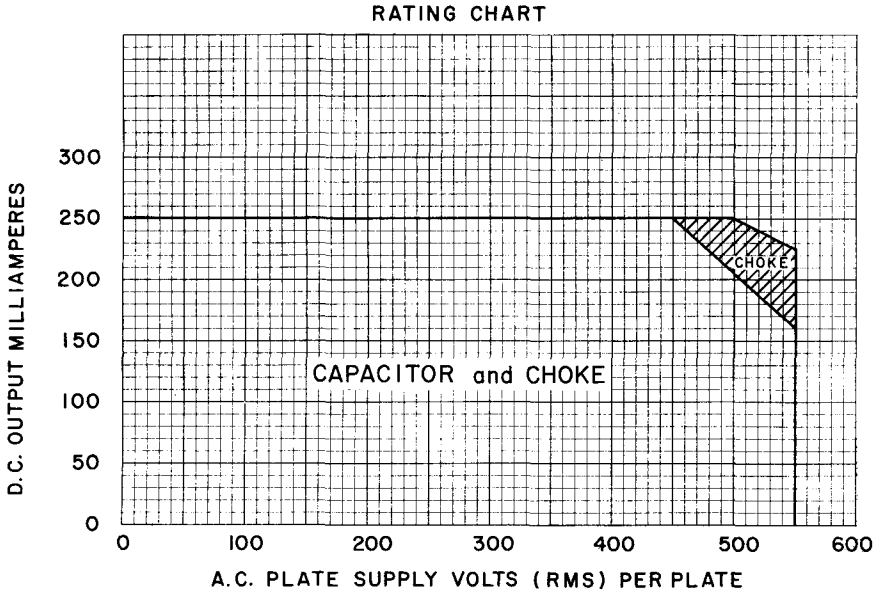
OPERATION CHARACTERISTICS
FULL-WAVE CIRCUIT, CHOKE INPUT TO FILTER



5AR4/GZ34

OPERATION CHARACTERISTICS
FULL-WAVE CIRCUIT, CAPACITOR INPUT TO FILTER




RATING CHART
D.C. OUTPUT MILLIAMPERES
300
250
200
150
100
50
0
CHOKE
CAPACITOR and CHOKE
0
100
200
300
400
500
600
A.C. PLATE SUPPLY VOLTS (RMS) PER PLATE