

TYPE 45Z5GT

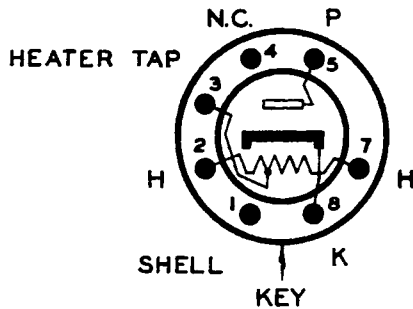


HYTRON BANTAM

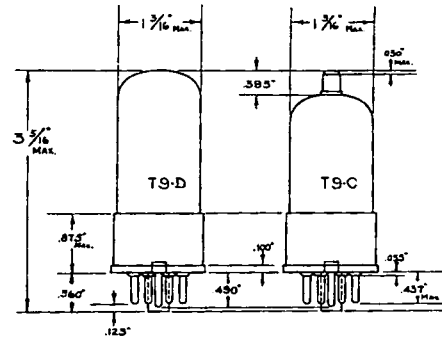
GENERAL DESCRIPTION

Application: The Hytron 45Z5GT is a cathode-type half-wave rectifier designed for service in AC-DC receivers. It features a 45 volt 150 milliampere heater having a tap brought out from the heater so that with proper external connections a single pilot lamp can be lighted to nominal brilliancy. It is recommended that the plate current of the rectifier be passed through the pilot lamp and the tapped section of the heater. This is accomplished by connecting the plate of the rectifier to the tap on the heater. The Hytron 45Z5GT is a glass tube with an octal base.

Physical Characteristics: T-9D



Bottom View



Rating and Characteristics

Heater:  
 Voltage 45.0 Volts AC or DC  
 Current .150 Ampere

Note: With 45 volts RMS between pins 2 and 7, the open circuit voltage between pins 2 and 3 is 7.5 volts RMS.

Maximum Conditions

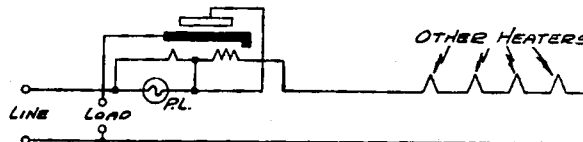
AC Plate Voltage (RMS)	125 Volts Max.
DC Load Current with No. 40 or No. 40A Pilot Lamp	50 Ma. Max.
DC Load Current with No. 50 or No. 51 Pilot Lamp	60 Ma. Max.
DC Load Current without Tap Connected	100 Ma. Max.
<u>AVERAGE TUBE VOLTAGE DROP</u>	16 Volts at 200 ma.

Note: No. 40 and No. 40A lamps are .15 Amp. at 6.3 volts. No. 50 and No. 51 lamps are .20 Amp. at 7.5 volts.

RECOMMENDATIONS:

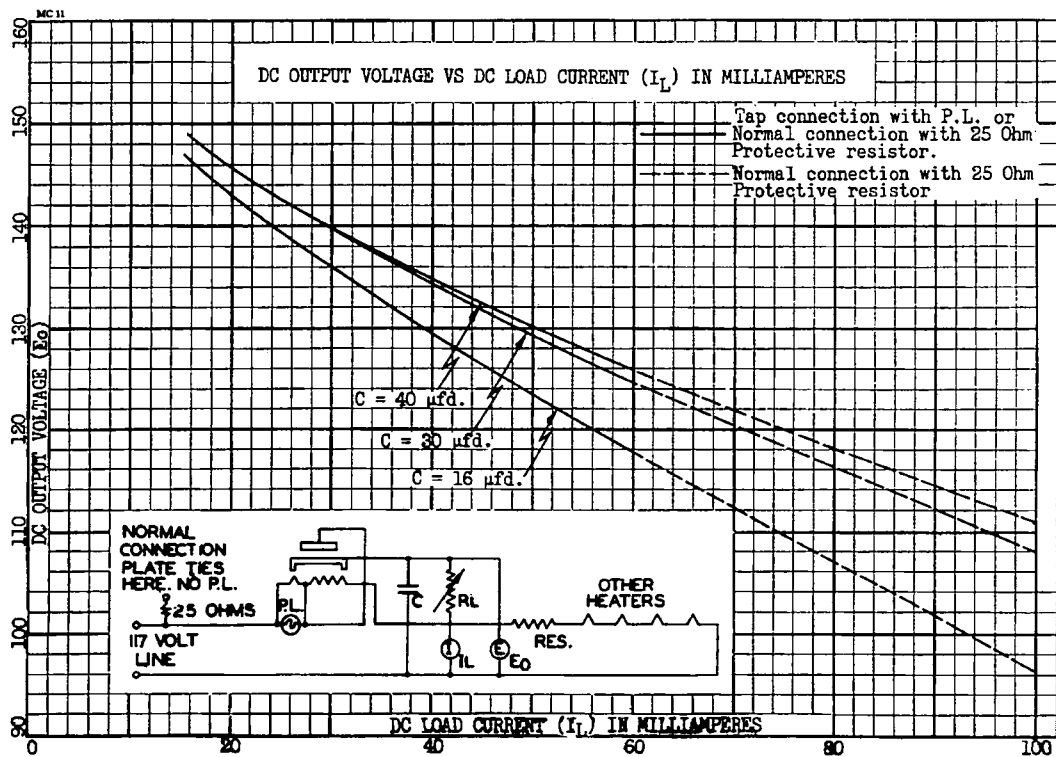
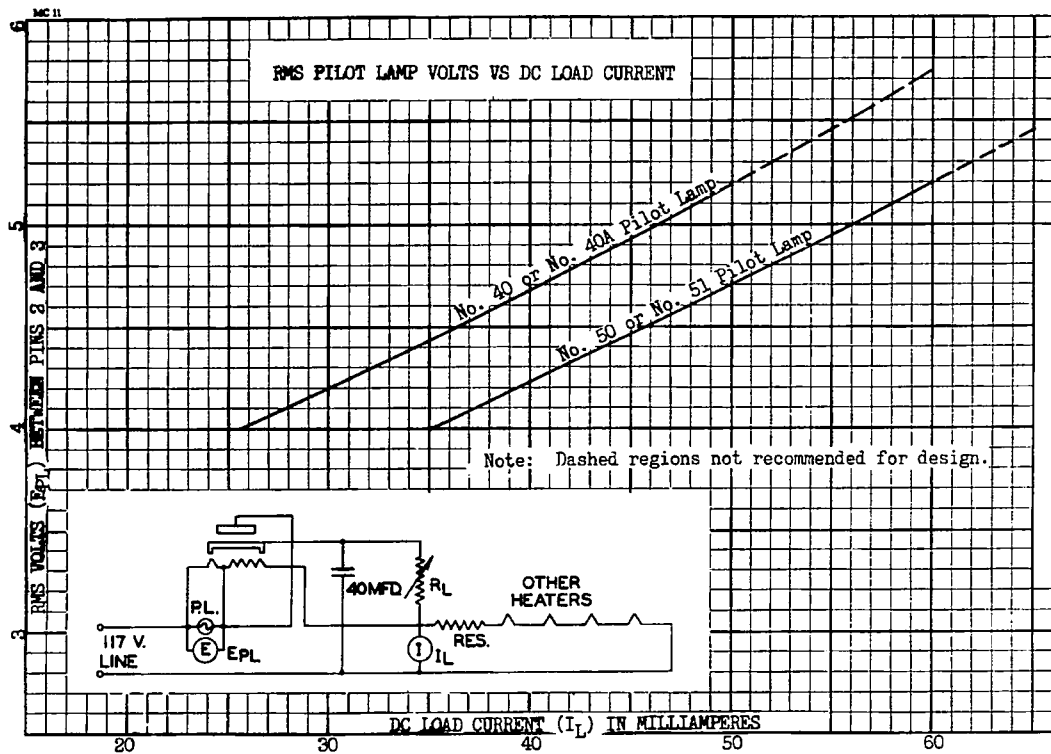
1. It is recommended that the pilot lamp and DC load current should be such that the potential between base pins 2 and 3 does not exceed 5.2 volts RMS at 117.0 volts line. This voltage should be measured with a thermal meter or a meter that will read RMS voltages. Rectifier type voltmeters, although calibrated in RMS volts, measure average volts and should not be used for this measurement.
2. It is recommended that the input filter condenser be limited to 40  $\mu$ fds.
3. Although it is possible to use DC load currents above 60 milliamperes in combination with high current pilot lamps such as the No. 44 and No. 46, this operation is not recommended because with pilot lamp failure excessive voltage appears between pins 2 and 3, causing heater burn out.
4. If the 45Z5GT is used without the tap connection, it is recommended that a 25 ohm protective resistor be used in series with the plate.
5. Voltages should not be applied to the socket when installing or removing tube.

TYPICAL CONDITIONS



Note: Drop across resistance and all heaters should total 117.0 volts at .150 ampere. B-3 3-39





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DATA CHANGE NOTICE - 45Z5GT

Due to a difficult situation arising from the revision of numbering on this type, it is found necessary to double-number this type with the following imprint: 40Z5/45Z5GT.

All tubes having been manufactured in the past bearing the above two type numbers have been identical in all electrical and physical respects and to avoid complications arising in the replacement field the use of double numbering has been resorted to.

The basing connections for type 40Z5/45Z5GT are identical with types 45Z5GT and 35Z5GT and for this reason, base pin connections and tube element drawings have not been supplied on this data correction sheet. Instead, an additional copy of standard 45Z5GT specifications have been attached.

HYTRON CORPORATION

Commercial Engineering Department