TUNG-SOL

FULL WAVE
MERCURY VAPOR RECTIFIER

COATED FILAMENT

82 - 2.5 VOLTS  3.0 AMPERES
83 - 5.0 VOLTS  3.0 AMPERES
AC

GLASS BULB

THE TUNG-SOL 82 AND 83 ARE DESIGNED FOR SERVICE AS POWER RECTIFIERS IN AC OPERATED RECEIVERS THAT REQUIRE A POWER SUPPLY WITH GOOD VOLTAGE REGULATION.

RATINGS

MAXIMUM PEAK INVERSE VOLTAGE
1550 1550 VOLTS

MAXIMUM STEADY-STATE PEAK PLATE CURRENT PER PLATE
345 675 MA.

OPERATING CONDITIONS AND CHARACTERISTICS

FULL WAVE RECTIFIER WITH CONDENSER INPUT TO FILTER

82  83

AC PLATE VOLTAGE PER PLATE (RMS)\textsuperscript{MAX.}
450  450 VOLTS

DC OUTPUT CURRENT \textsuperscript{MAX.}
115  225 MA.

TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE \textsuperscript{MIN.} A
50  50 OHMS

CONDENSED MERCURY TEMPERATURE OPERATING RANGE
24°-60°  20°-60° CENTIGRADE

FULL WAVE RECTIFIER WITH CHOKE INPUT TO FILTER

82  83

AC PLATE VOLTAGE PER PLATE (RMS)\textsuperscript{MAX.}
550  550 VOLTS

DC OUTPUT CURRENT \textsuperscript{MAX.}
115  225 MA.

VALUE OF INPUT CHOKE \textsuperscript{MIN.}
6  3 HENRYS

CONDENSED MERCURY TEMPERATURE OPERATING RANGE
24°-60°  20°-60° CENTIGRADE

APPROXIMATE TUBE VOLTAGE DROP
15  15 VOLTS

A WHEN FILTER CONDENSERS LARGER THAN 40 \mu FDS ARE USED, IT MAY BE NECESSARY TO ADD ADDITIONAL PLATE SUPPLY IMPEDANCE. THE 82 AND 83 MAY BE OPERATED WITH PLATES CONNECTED IN PARALLEL TO EQUALIZE THE CURRENT DISTRIBUTION BETWEEN PLATES, WHEN 50 CONNECTED, IT IS NECESSARY TO ADD RESISTANCE IN SERIES WITH EACH PLATE LEAD (TYPE 82: 300 OHMS, TYPE 83: 50 OHMS). FOR PARALLEL OPERATION IN A FULL-WAVE CIRCUIT, IT IS DESIRABLE THAT BOTH PLATES WITHIN THE SAME TUBE BE CONNECTED TO THE SAME TERMINAL OF THE PLATE TRANSFORMER.

FULL PLATE LOAD SHOULD NOT BE APPLIED TO THIS TUBE UNTIL THE FILAMENTS HAVE REACHED THEIR NORMAL OPERATING TEMPERATURE. UNDER NORMAL OPERATING CONDITIONS, THE FILAMENTS HEAT QUICKLY WHEN THE SET IS "TURNED ON" AND ARE READY TO SUPPLY FULL-LOAD CURRENT BEFORE THE TUBES IN THE RECEIVER REQUIRE IT.

FOR INTERPRETATION OF RATINGS, REFER TO FRONT OF BOOK.

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