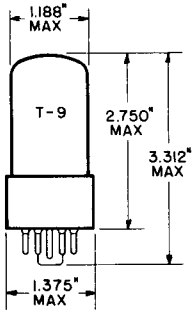
TUNG-SOL

OUTLINE DRAWING



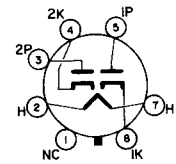
GLASS BULB
LOW LOSS MEDIUM SHELL 7 PIN OCTAL WITH RUBBER INSERT BASE B7-12

TWIN DIODE
FOR
USE IN THE
POWER SUPPLY OF AC
OR AC/DC RECEIVERS

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION

BASING DIAGRAM JEDEC 7Q



BOTTOM VIEW

THE 25Z6WGT IS A RUGGEDIZED HEATER-CATHODE TYPE FULL-WAVE HIGH-VACUUM RECTIFIER-DOUBLER IN THE OCTAL BASE T-9 CONSTRUCTION. IT IS DESIGNED FOR USE IN THE POWER SUPPLY OF AC OR AC/DC RECEIVERS.

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES – SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	25.0	VOLTS	300	mA
LIMITS OF APPLIED VOLTAGE			25.0±2.5	VOLTS
HEATER-CATHODE VOLTAGE			350	VOLTS

MAXIMUM RATINGS

ABSOLUTE MAXIMUM VALUES – SEE EIA STANDARD RS-239

PEAK INVERSE PLATE VOLTAGE	730	VOLTS
PEAK PLATE CURRENT PER PLATE	500	mA
DC OUTPUT CURRENT PER PLATE	85	mA
ALTITUDE	10,000	FT.

AVERAGE CHARACTERISTICS

TUBE VOLTAGE DROP AT I_b = 150mA	22	VOLTS

PRINTED IN U. S. A.

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATION

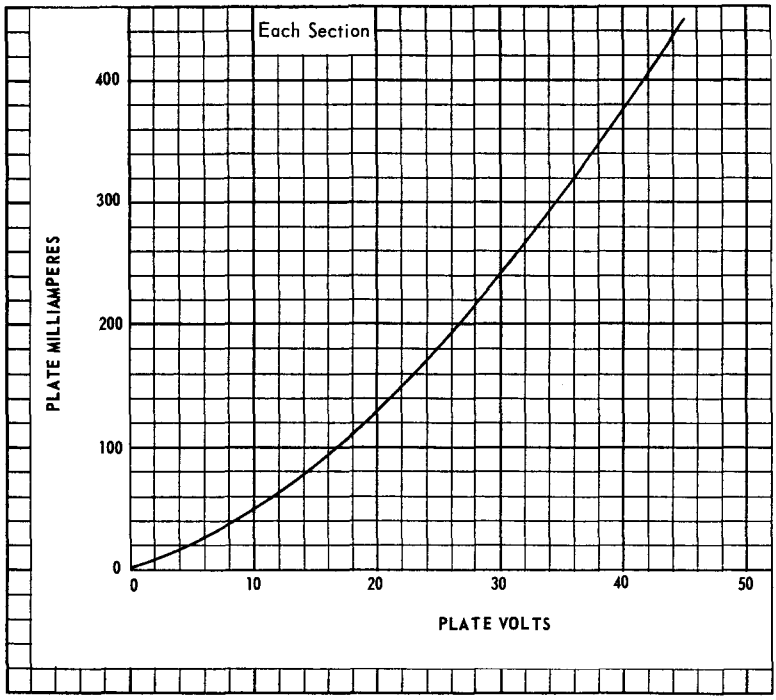
HALF-WAVE RECTIFIER (CAPACITOR INPUT FILTER)*

PLATE SUPPLY VOLTAGE, RMS, PER PLATE	117	235	VOLTS
PLATE SUPPLY RESISTANCE PER PLATE	15	100	OHMS
FILTER INPUT CAPACITOR	16	16	μF
DC OUTPUT CURRENT PER PLATE	75	75	mA
DC OUTPUT VOLTAGE AT FILTER INPUT	115	255	VOLTS

*AS A HALF-WAVE RECTIFIER, THE TWO SECTIONS MAY BE USED SEPARATELY OR IN PARALLEL.

TYPICAL OPERATION

VOLTAGE DOUBLER

	HALF-WAVE	FULL-WAVE	
PLATE SUPPLY VOLTAGE, RMS, PER PLATE	117	117	VOLTS
FILTER INPUT CAPACITOR	16	16	μF
PLATE SUPPLY IMPEDANCE PER PLATE	30	15	OHMS
DC OUTPUT CURRENT	75	75	mA
DC OUTPUT VOLTAGE AT FILTER INPUT:			
AT HALF-LOAD CURRENT OF 37.5 mA	–	250	VOLTS
AT FULL-LOAD CURRENT OF 75 mA	–	205	VOLTS

NOTE: WHEN FILTER CAPACITORS LARGER THAN 40 μF ARE USED, IT MAY BE NECESSARY TO INCREASE PLATE SUPPLY RESISTANCE ABOVE VALUE GIVEN.