

TUNG-SOL

HALF-WAVE RECTIFIER
MINIATURE TYPE

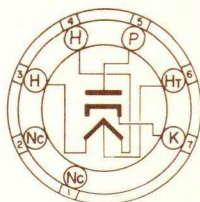
COATED UNIPOTENTIAL CATHODE

HEATER

36 VOLTS^A 32 VOLTS^B
0.10 AMP.

AC OR DC

ANY MOUNTING POSITION

^ABETWEEN PINS 3 AND 4.^BBETWEEN PINS 3 AND 6.

BOTTOM VIEW

MINIATURE BUTT
7 PIN BASE

5BQ

THE 36AM3 IS A HALF-WAVE RECTIFIER IN THE 7 PIN MINIATURE CONSTRUCTION. IT HAS A 100 MA. HEATER AND A HEATER TAP-SECTION THAT IS DESIGNED FOR OPERATION IN SERIES WITH THE PLATE SUPPLY INPUT, SERVING AS A CURRENT LIMITING DEVICE.

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM^D

HEATER VOLTAGE ^C (BETWEEN PINS 3 & 4)	36	VOLTS
HEATER VOLTAGE (BETWEEN PINS 3 & 6)	32	VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE	365	VOLTS
MAXIMUM STEADY-STATE PEAK PLATE CURRENT	530	MA.
MAXIMUM STEADY-STATE DC OUTPUT CURRENT	82	MA.
EFFECTIVE PLATE SUPPLY RESISTANCE	SEE NOTE E	
MAXIMUM HEATER-CATHODE VOLTAGE ^C		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DC	350	VOLTS
TOTAL DC AND PEAK	350	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK (ABS. VALUE)	200	VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

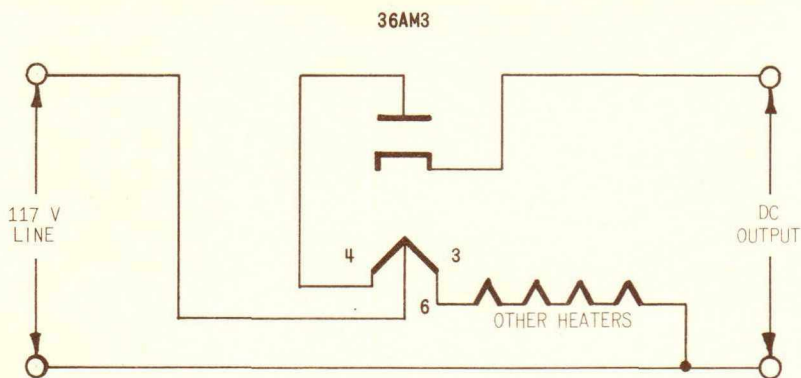
(SEE DIAGRAM)

HALF WAVE RECTIFIER - CAPACITOR INPUT

HEATER VOLTAGE ^C (BETWEEN PINS 3 & 4)	36	VOLTS
HEATER VOLTAGE (BETWEEN PINS 3 & 6)	32	VOLTS
HEATER CURRENT	0.10	AMP.
AC PLATE SUPPLY VOLTAGE (RMS)	117	VOLTS
DC OUTPUT CURRENT	75	MA.
DC OUTPUT VOLTAGE	105	VOLTS
EFFECTIVE PLATE SUPPLY RESISTANCE	SEE NOTE E	
INPUT CAPACITOR	40	μf
TUBE VOLTAGE DROP FOR $I_b = 150$ MA.	20	VOLTS

CONTINUED ON FOLLOWING PAGE

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TYPICAL APPLICATION

NOTES

C THE HEATER IS DESIGNED TO BE USED IN THE CONNECTION SHOWN IN THE DIAGRAM. THE SECTION BETWEEN PINS 4 AND 6 IS INTENDED FOR USE AS A LIMITING RESISTANCE IN THE RECTIFIER PLATE CIRCUIT. THE TUBE IS NOT DESIGNED FOR USE WITH A PILOT LAMP WHERE THE HEATER SECTION BETWEEN PINS 4 AND 6 IS USED AS A PILOT LAMP SHUNT.

D DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

E THE TUBE SHOULD BE OPERATED WITH THE HEATER SECTION BETWEEN PIN 4 AND 6 IN SERIES WITH THE PLATE CIRCUIT. WITH 82 MADC OUTPUT CURRENT THE RESISTANCE OF THIS SECTION IS APPROXIMATELY 45 OHMS.