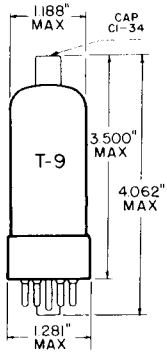
TUNG-SOL

DIODE



GLASS BULB
8B-8 INTERMEDIATE SHELL
OR
8B-8C SHORT
INTERMEDIATE SHELL
8 PIN OCTAL
OUTLINE DRAWING
8-53 WITH 8B-8C OR
8-54 WITH 8B-8

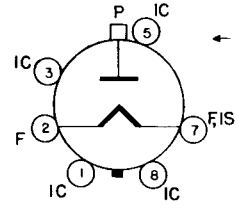
COATED FILAMENT

1.25 VOLTS 200 MA.

AC OR DC

ANY MOUNTING POSITION

CONNECTORS SHOULD NOT EXERT MORE THAN 7 POUNDS RADIAL COMPRESSION AT ANY POINT AROUND THE CIRCUMFERENCE OF THE CAP.*



BOTTOM VIEW

BASING DIAGRAM
JEDEC 3C

SOCKET TERMINALS 1, 3, 4, 5, 6, AND 8 MAY BE CONNECTED TO TERMINAL 7 OR TO A CORONA SHIELD WHICH CONNECTS TO TERMINAL 7. TERMINALS 4 AND 6 MAY BE USED AS TIE POINTS FOR COMPONENTS AT OR NEAR FILAMENT POTENTIAL.

THE 1K3 IS A FILAMENTARY DIODE DESIGNED FOR USE IN TELEVISION RECEIVERS AS A HIGH-VOLTAGE RECTIFIER TO SUPPLY POWER TO THE ANODE OF THE TELEVISION PICTURE TUBE. IT IS INTENDED PRIMARILY FOR USE IN FLYBACK TYPES OF POWER SUPPLIES AND IS A DIRECT REPLACEMENT FOR THE 1J3.

DIRECT INTERELECTRODE CAPACITANCES — APPROX.

WITHOUT EXTERNAL SHIELD

PLATE TO FILAMENT	1.6	pf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

FLYBACK RECTIFIER SERVICE[A]

FILAMENT VOLTAGE	1.25[B]	VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE		
DC COMPONENT	22 000	VOLTS
TOTAL DC AND PEAK	26 000	VOLTS
MAXIMUM STEADY-STATE PEAK PLATE CURRENT	50	MA.
MAXIMUM DC OUTPUT CURRENT	0.5	MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

FILAMENT VOLTAGE	1.25	VOLTS
FILAMENT CURRENT	0.2	AMP.
TUBE VOLTAGE DROP (APPROX.) I_b =7.0 MA. DC	225	VOLTS

CONTINUED ON FOLLOWING PAGE

*INDICATES AN ADDITION.

→INDICATES A CHANGE.

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CONTINUED FROM PRECEDING PAGE

NOTES

[A] FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCAST STATIONS: FEDERAL COMMUNICATIONS COMMISSION", THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE.

[B] UNDER NO CIRCUMSTANCES SHOULD THE FILAMENT VOLTAGE BE LESS THAN 1.05 VOLTS OR MORE THAN 1.45 VOLTS.

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.

THE VOLTAGES EMPLOYED IN SOME TELEVISION RECEIVERS AND OTHER HIGH-VOLTAGE EQUIPMENT ARE SUFFICIENTLY HIGH THAT HIGH-VOLTAGE RECTIFIER TUBES MAY PRODUCE SOFT X-RAYS WHICH CAN CONSTITUTE A HEALTH HAZARD UNLESS SUCH TUBES ARE ADEQUATELY SHIELDED. THE NEED FOR THIS PRECAUTION SHOULD BE CONSIDERED IN EQUIPMENT DESIGN. RELATIVELY SIMPLE SHIELDING SHOULD PROVE ADEQUATE.