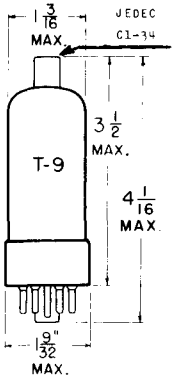
TUNG-SOL

DIODE



GLASS BULB

SEE NOTE "A"

OUTLINE DRAWING
JEDEC 9-51 OR 9-52

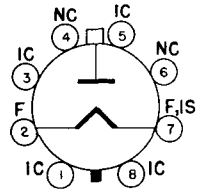
COATED FILAMENT

FOR HIGH VOLTAGE SUPPLY

IN T.V. SERVICE

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 & 8 MAY BE CONNECTED TO TERMINAL 7 OR TO A CORONA SHIELD WHICH CONNECTS TO TERMINAL 7. TERMINALS 4&6 MAY BE USED AS TIE POINTS FOR COMPONENTS AT OR NEAR FILAMENT POTENTIAL.

THE 1B3GT IS A FILAMENTARY DIODE DESIGNED TO OPERATE AT RELATIVELY HIGH INVERSE PEAK VOLTAGES OVER A CONSIDERABLE RANGE OF SUPPLY VOLTAGE FREQUENCIES. IT IS INTENDED TO SUPPLY THE REQUIRED HIGH VOLTAGES FOR THE CATHODE RAY PICTURE TUBE IN TELEVISION SERVICE.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

PLATE TO FILAMENT:(P TO F+I.S.)	1.3	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES -SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	125 VOLTS	200	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION[B]		1.25±0.2	VOLTS
CURRENT OPERATION (AT Ef =1.25 V.)		200	MA.
TUBE DROP (APPROX) WITH 7 MA. PLATE CURRENT		100	VOLTS

→ MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

FLYBACK VOLTAGE RECTIFIER[C]

INVERSE PLATE VOLTAGE:		
TOTAL DC AND PEAK	26	KV
DC	22	KV
PEAK PLATE CURRENT	50	MA.
AVERAGE PLATE CURRENT	0.5	MA.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

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TUNG-SOL

MAXIMUM RATINGS - CONT'D.

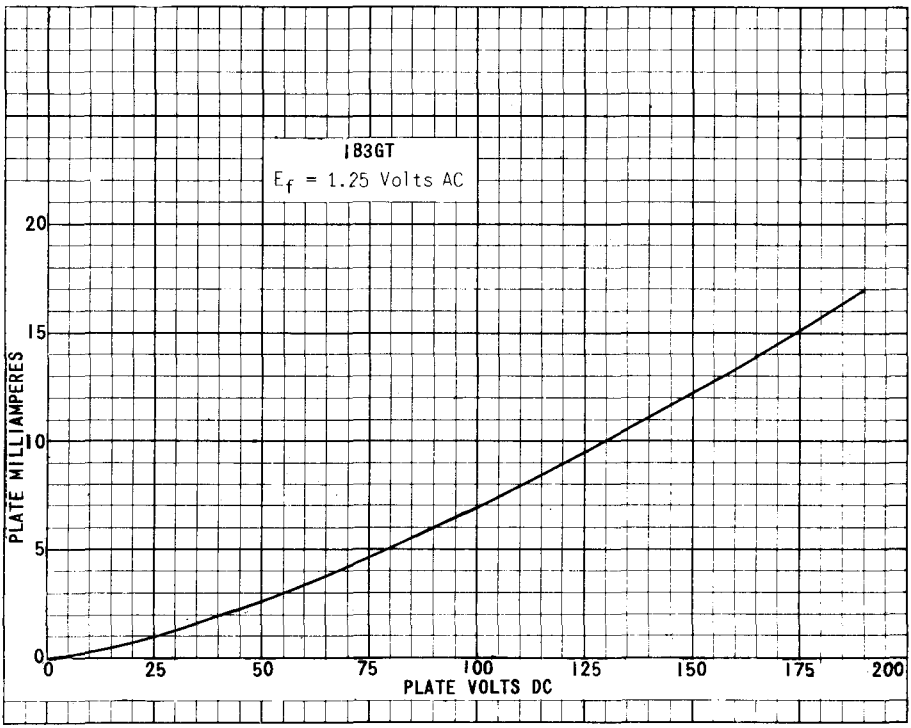
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

RF VOLTAGE RECTIFIER

PEAK INVERSE PLATE VOLTAGE	33	KV
PEAK PLATE CURRENT	.35	MA.
AVERAGE PLATE CURRENT	1.1	MA.
FREQUENCY OF SUPPLY VOLTAGE (MAX.)	100	KCS
FREQUENCY OF SUPPLY VOLTAGE (MIN.)	1.5	KCS

[A] B5-82,B6-8, B6-60, B6-144, B7-166, B7-211, B8-6, B8-50, OCTAL 5, 6, 7, OR 8- PIN

[B] 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.

[C] 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.

THIS TUBE MAY PRODUCE SOFT X-RAYS WHICH CAN CONSTITUTE A HEALTH HAZARD UNLESS ADEQUATELY SHIELDED