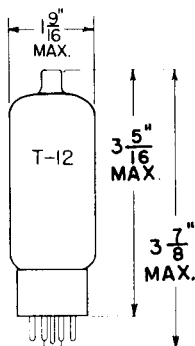


**TUNG-SOL**

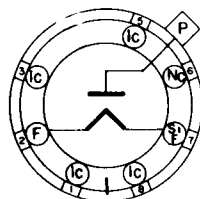
DIODE



GLASS BULB

COATED FILAMENT CATHODE  
 FILAMENT  
 1.25±0.2 VOLTS 0.20 AMP.

ANY MOUNTING POSITION



**BOTTOM VIEW**  
 SHORT MEDIUM SHELL  
 OCTAL  
 7 PIN BASE<sup>A</sup>  
 3c

THE 1AU3 IS A FILAMENTARY HALF-WAVE DIODE INCORPORATING AN ELECTROSTATIC SHIELD, WHICH IS LOCATED ADJACENT TO THE FILAMENT. IT IS INTENDED FOR SERVICE AS THE HIGH VOLTAGE RECTIFIER IN TELEVISION RECEIVERS AND OTHER HIGH VOLTAGE RECTIFIER APPLICATIONS.

**DIRECT INTERELECTRODE CAPACITANCES**

PLATE TO FILAMENT AND INTERNAL SHIELD 2.0  $\mu$ f

**RATINGS**

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM<sup>D</sup>

FLYBACK VOLTAGE RECTIFIER<sup>E</sup>

FILAMENT VOLTAGE <sup>B</sup>	1.25±0.2	VOLTS
MAXIMUM INVERSE PLATE VOLTAGE		
TOTAL DC AND PEAK	30 000	VOLTS
DC	26 000	VOLTS
MAXIMUM PEAK PLATE CURRENT	50	MA.
MAXIMUM AVERAGE PLATE CURRENT	0.5	MA.

**CHARACTERISTICS**

FILAMENT VOLTAGE <sup>B</sup>	1.25±0.2	VOLTS
FILAMENT CURRENT <sup>C</sup>	0.20	AMP.
TUBE DROP FOR I <sub>b</sub> = 7 MA. (APPROX.)	225	VOLTS

<sup>A</sup> 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.

CONTINUED ON FOLLOWING PAGE

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**TUNG-SOL**

B. THE EQUIPMENT DESIGNER SHALL DESIGN THE EQUIPMENT THAT THE FILAMENT VOLTAGE IS CENTERED AT THE SPECIFIED BOGEY VALUE. FILAMENT SUPPLY VARIATIONS SHALL BE RESTRICTED TO MAINTAIN FILAMENT VOLTAGE WITHIN THE SPECIFIED TOLERANCE.

C. THE BOGEY VALUE OF CURRENT IS OBTAINED WHEN OPERATING THE FILAMENT AT THE SPECIFIED 1.25 VOLTS.

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. 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.

**WARNING:**

X-RAY RADIATION SHIELD MAY BE NECESSARY TO PROTECT AGAINST POSSIBLE DANGER OF PERSONAL INJURY FROM PROLONGED EXPOSURE AT CLOSE RANGE IF THIS TUBE IS OPERATED AT HIGHER THAN THE MANUFACTURER'S MAXIMUM RATED PLATE VOLTAGE OF 16,000 VOLTS, WHICHEVER IS LESS.