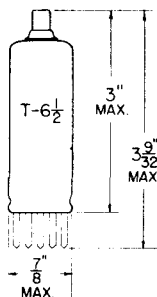


TUNG-SOL



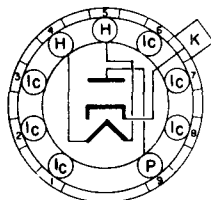
GLASS BULB
SKIRTED MINIATURE

DIODE
MINIATURE TYPE

UNIPOTENTIAL CATHODE

HEATER
 $6.3 \pm 10\%$ VOLTS 1.2 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
SMALL-BUTTON
9 PIN NOVAL
9CB

THE 6AF3 IS A SINGLE INDIRECTLY-HEATED DIODE INTENDED FOR USE IN HORIZONTAL FREQUENCY DAMPER SERVICE TELEVISION RECEIVERS. IT IS DESIGNED TO WITHSTAND HIGH VOLTAGE PULSES OF LINE FREQUENCY BETWEEN CATHODE AND BOTH HEATER AND PLATE ELEMENTS SUCH AS NORMALLY ENCOUNTERED IN "DIRECT DRIVE" CIRCUITS.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

HEATER TO CATHODE H TO K	2.8	$\mu\mu\text{f}$
CATHODE TO PLATE AND HEATER K TO (P + H)	9.0	$\mu\mu\text{f}$
PLATE TO CATHODE AND HEATER P TO (K + H)	6.0	$\mu\mu\text{f}$

RATINGS^A

INTERPRETED ACCORDING TO DESIGN-MAXIMUM SYSTEM^{BC}

HEATER VOLTAGE	$6.3 \pm 10\%$ VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:	
HEATER NEGATIVE WITH RESPECT TO CATHODE	
DC	1000 VOLTS
TOTAL DC AND PEAK	4500 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	
DC	100 VOLTS
TOTAL DC AND PEAK	300 VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE	4500 VOLTS
MAXIMUM DC PLATE CURRENT	185 MA.
MAXIMUM STEADY STATE PEAK PLATE CURRENT	750 MA.
MAXIMUM PLATE DISSIPATION	6.0 WATTS
MAXIMUM BULB TEMPERATURE	210 °C

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

AVERAGE CHARACTERISTICS

TUBE VOLTAGE DROP

(WITH TUBE CONDUCTING PLATE CURRENT ≈ 340 MA.)

30

VOLTS

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

^AFOR 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.

^BUNLESS OTHERWISE STATED.

^CDESIGN-MAXIMUM RATINGS ARE THE LIMITING VALUES EXPRESSED WITH RESPECT TO BOTTLE TUBES AT WHICH SATISFACTORY TUBE LIFE CAN BE EXPECTED TO OCCUR. TO OBTAIN SATISFACTORY CIRCUIT PERFORMANCE, THEREFORE, THE EQUIPMENT DESIGNER MUST ESTABLISH THE CIRCUIT DESIGN SO THAT NO DESIGN-MAXIMUM VALUE IS EXCEEDED WITH A BOTTLE TUBE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.