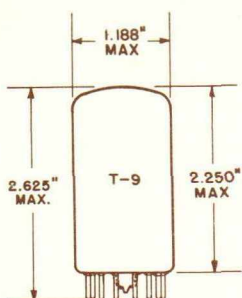


TUNG-SOL

DIODE

COMPACTRON

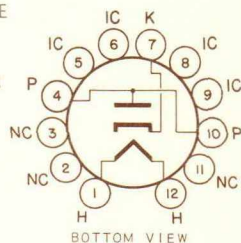


GLASS BULB
BUTTON
12 PIN BASE E12-70
OUTLINE DRAWING
JEDEC 9-59

COATED UNIPOTENTIAL CATHODE

FOR
DAMPING DIODE APPLICATIONS
IN TV RECEIVERS

AC OR DC
ANY MOUNTING POSITION



BASING DIAGRAM
JEDEC 128L

THE 12AX3 IS A HEATER-CATHODE SINGLE DIODE IN THE COMPACT 12 PIN, T-9 CONSTRUCTION. IT IS SPECIFICALLY DESIGNED FOR USE AS A DAMPING DIODE IN T.V. RECEIVERS. EXCEPT FOR HEATER CHARACTERISTICS AND HEATER WARM-UP TIME, THE 12AX3 IS IDENTICAL TO THE 6AX3.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

CATHODE TO PLATE AND HEATER: K TO (P+H)	7.5	pf
PLATE TO CATHODE AND HEATER: P TO (K+H)	5.5	pf
HEATER TO CATHODE: (H TO K)	2.8	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	12.6 VOLTS	600	MA.
HEATER SUPPLY LIMITS:			
CURRENT OPERATION ^A		600±40	MA.
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
DC COMPONENT		900	VOLTS
TOTAL DC AND PEAK		5000	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT		100	VOLTS
TOTAL DC AND PEAK		300	VOLTS
HEATER WARM-UP TIME		11	SECONDS

^ATHE EQUIPMENT DESIGNER SHALL DESIGN THE EQUIPMENT SO THAT THE HEATER VOLTAGE IS CENTERED AT THE SPECIFIED BOGEY VALUE, WITH HEATER SUPPLY VARIATIONS RESTRICTED TO MAINTAIN HEATER VOLTAGE WITHIN THE SPECIFIED TOLERANCE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS^B

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

TV DAMPER SERVICE

PEAK INVERSE PLATE VOLTAGE	5000	VOLTS
PLATE DISSIPATION	5.3	WATTS
STEADY-STATE PEAK PLATE CURRENT	1000	MA.
DC OUTPUT	165	MA.

AVERAGE CHARACTERISTICS

TUBE VOLTAGE DROP

 $I_b = 250$ MILLIAMPERES DC

32 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.

^B 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.

