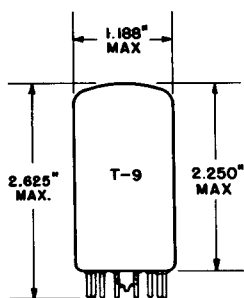


TUNG-SOL

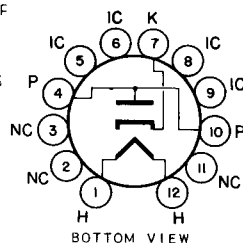
DIODE
COMPACTRON

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

COATED UNIPOTENTIAL CATHODE

DAMPING DIODE APPLICATIONS
IN TV RECEIVERS

ANY MOUNTING POSITION



BASING DIAGRAM
JEDEC 12BL

THE 17AX3 IS A HEATER-CATHODE SINGLE DIODE IN THE COMPACT 12 PIN T-9 CONSTRUCTION. ITS HIGH HEATER AND CATHODE INSULATION IS DESIGNED FOR USE AS A DAMPING DIODE IN T.V. RECEIVERS.

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	16.8	VOLTS	450	MA.
HEATER WARM-UP TIME*			11	SECONDS
HEATER SUPPLY LIMITS:				
CURRENT OPERATION ^A			450±30	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

^A
FOR SERIES HEATER OPERATION, THE EQUIPMENT DESIGNER SHALL SO DESIGN THE EQUIPMENT THAT THE HEATER CURRENT IS AT THE SPECIFIED BOGEY VALUE, WITH HEATER SUPPLY VARIATIONS RESTRICTED TO MAINTAIN HEATER CURRENT WITHIN THE SPECIFIED TOLERANCE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

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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

SIMILAR TYPE REFERENCE: Except for heater ratings, the 17AX3 is identical to the 6AX3 and the 12AX3.

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 THREE TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

^BFOR 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.

