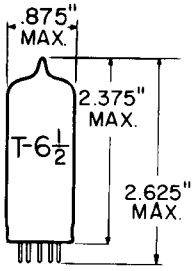
TUNG-SOL

DIODE-REMOTE-CUTOFF PENTODE

MINIATURE TYPE

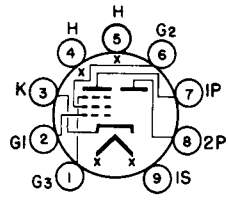


GLASS BULB
SMALL BUTTON
9 PIN NOVAL E9-1
OUTLINE DRAWING
JEDEC 6-3

UNIPOTENTIAL CATHODE

FOR AM AND AM/FM
BROADCAST RECEIVERS

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 9LQ

THE 12EQ7 IS A DIODE AND A REMOTE-CUTOFF PENTODE WITH A COMMON CATHODE OF THE 9 PIN MINIATURE TYPE ESPECIALLY DESIGNED FOR USE AS COMBINED IF-AMPLIFIER AND AM-DETECTOR TUBES IN AM AND AM/FM BROADCAST RECEIVERS. THE PENTODE UNIT MAY ALSO BE USED AS AN RF-OR IF-AMPLIFIER TUBE; THE DIODE UNIT MAY BE USED FOR AUTOMATIC VOLUME CONTROL OR DETECTION.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE (MAX.)	.002	pf
GRID #1 TO K, H, G2, G3, & I.S.	5.5	pf
PLATE TO K, H, G2, G3, & I.S.	5.0	pf
GRID #1 TO DIODE PLATE (MAX.)	0.0015	pf
PENTODE PLATE TO DIODE PLATE	.095	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	12.6 VOLTS	150	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION		12.6±1.3	VOLTS
MAXIMUM PEAK HEATER CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		200[A]	VOLTS

[A] THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

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MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

CLASS A_1 AMPLIFIER—PENTODE UNIT

PLATE VOLTAGE	300	VOLTS
GRID #3 VOLTAGE:		
POSITIVE VALUE	300	VOLTS
NEGATIVE VALUE	300	VOLTS
GRID #2 SUPPLY VOLTAGE	300	VOLTS
GRID #2 VOLTAGE	SEE RATING CHART	
GRID #1 VOLTAGE:		
POSITIVE BIAS VALUE	0	VOLTS
NEGATIVE BIAS VALUE	50	VOLTS
PLATE DISSIPATION	3	WATTS
GRID #3 INPUT	0.2	WATT
GRID #2 INPUT:		
FOR GRID #2 VOLTAGES UP TO 150 VOLTS	0.6	WATT
FOR GRID #2 VOLTAGES BETWEEN 150 & 300 VOLTS	SEE RATING CHART	
BULB TEMPERATURE (AT HOTTEST POINT ON BULB SURFACE)	150	°C

DIODE UNIT

PLATE CURRENT	1.0	MA.

TYPICAL OPERATING CHARACTERISTICS

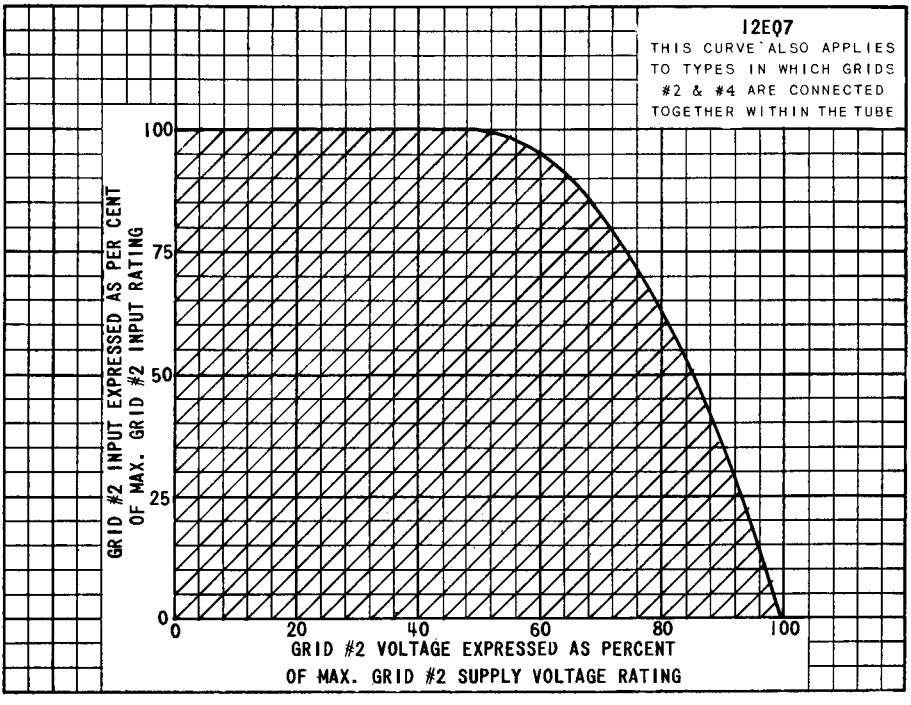
CLASS A_1 AMPLIFIER

PENTODE UNIT

PLATE VOLTAGE	100	VOLTS
GRID #3	CONNECT TO CATHODE AT SOCKET	
INTERNAL SHIELD	CONNECT TO CATHODE AT SOCKET	
GRID #2 VOLTAGE	100	VOLTS
GRID #1 SUPPLY VOLTAGE	0	VOLT
GRID #1 RESISTOR (BYPASSED)	2.2	MEGOHMS
TRANSCONDUCTANCE	3800	μMHOS
PLATE RESISTANCE (APPROX.)	0.25	MEGOHM
PLATE CURRENT	9	MA.
GRID #2 CURRENT	3.5	MA.
GRID #1 VOLTAGE (APPROX.) FOR TRANSCONDUCTANCE OF 40 μMHOS	-20	VOLTS

DIODE UNIT - AVERAGE CHARACTERISTICS

PLATE VOLTAGE	10	VOLTS
PLATE CURRENT	2	MA.



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