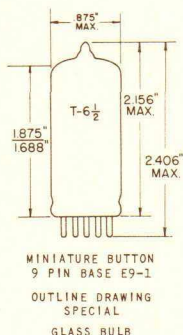


TUNG-SOL

SHARP CUTOFF PENTODE

MINIATURE TYPE

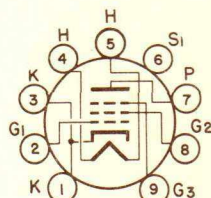


COATED UNIPOTENTIAL CATHODE

FOR IF CIRCUITS IN TV RECEIVERS

SERIES STRING OPERATION

ANY MOUNTING POSITION



BASING DIAGRAM

JEDEC 9AQ

BOTTOM VIEW

THE 4EJ7 IS A HIGH TRANSCONDUCTANCE SHARP-CUTOFF PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR SERVICE AS AN IF AMPLIFIER IN TELEVISION RECEIVERS. CONTROLLED HEATER WARM-UP TIME MAKES THE TUBE SUITABLE FOR SERIES STRING OPERATION.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE (MAX.)	.005	pf
INPUT: G1 TO (H+K+G2+G3+I.S.)	10	pf
OUTPUT: P TO (H+K+G2+G3+I.S.)	3	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	4.4 VOLTS	450	MA.
HEATER SUPPLY LIMITS:			
CURRENT OPERATION		450±30	MA.
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		150	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		150	VOLTS
HEATER WARM-UP TIME ^A		11	SECONDS

MAXIMUM RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239^B

PLATE VOLTAGE WITH $I_b = 0$ MA.	550	VOLTS
PLATE VOLTAGE	250	VOLTS
GRID #2 VOLTAGE WITH $I_{c2} = 0$ MA	550	VOLTS
GRID #2 VOLTAGE	250	VOLTS
PLATE DISSIPATION	2.5	WATTS
GRID #2 DISSIPATION	0.9	WATTS
CATHODE CURRENT	25	MA.
GRID #1 CIRCUIT RESISTANCE	1.0	MEG OHM

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TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CHARACTERISTICS

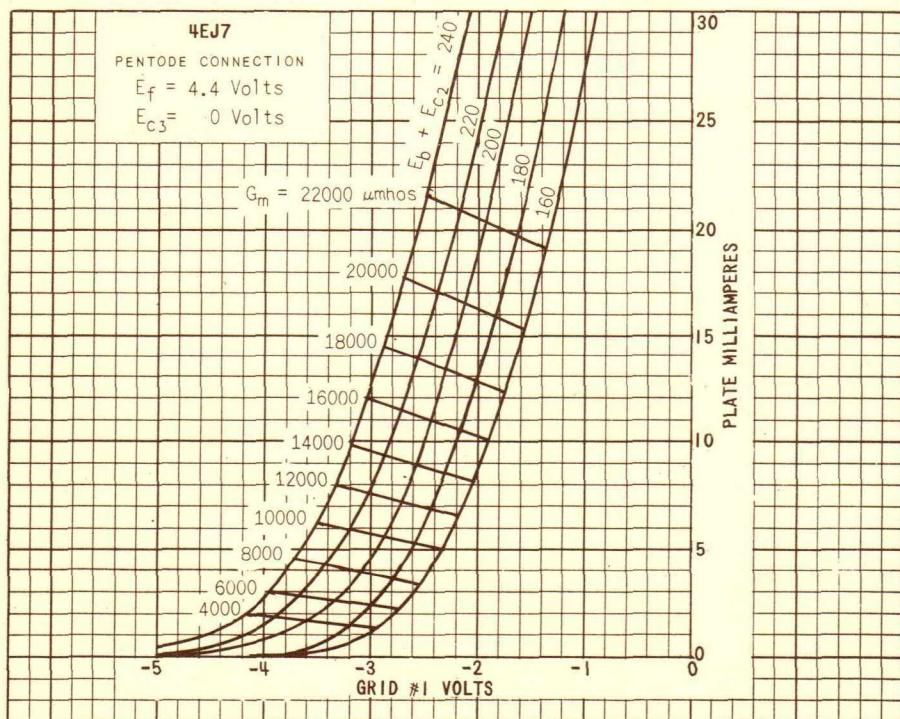
CLASS A_1 AMPLIFIER

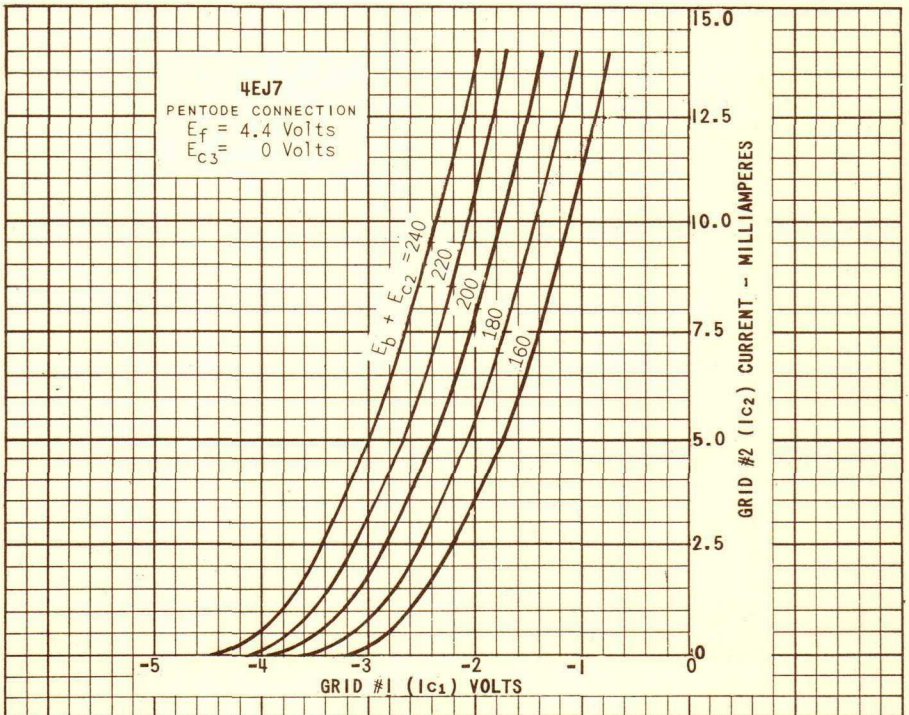
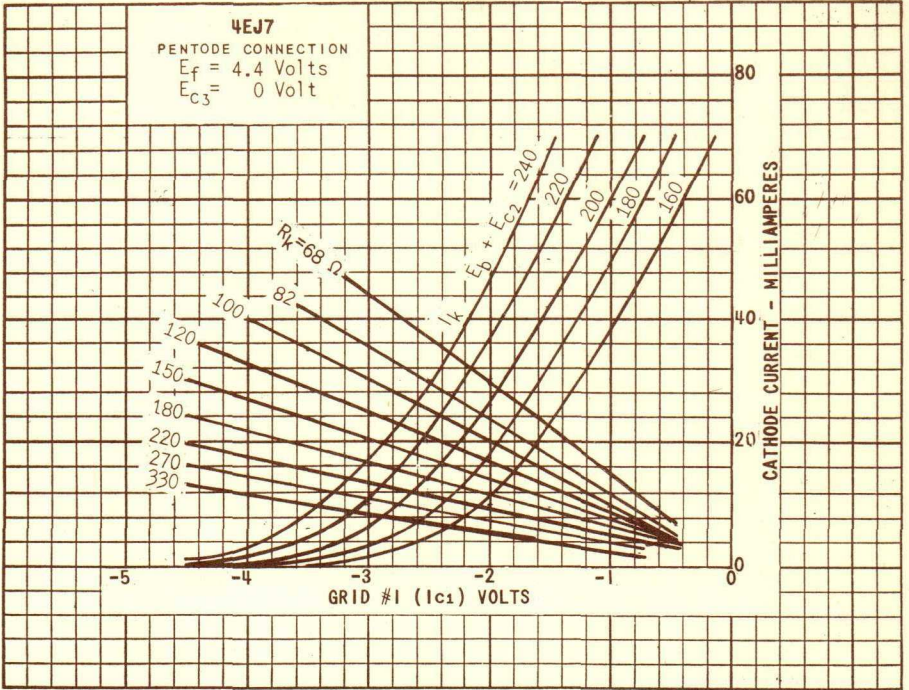
PLATE VOLTAGE	200	VOLTS
GRID #3 VOLTAGE	0	VOLTS
GRID #2 VOLTAGE	200	VOLTS
GRID #1 VOLTAGE	-2.5	VOLTS
PLATE CURRENT	10	MA.
GRID #2 CURRENT	4.1	MA.
TRANSCONDUCTANCE	15000	μ MHOS
AMPLIFICATION FACTOR (G_2 TO G_1)	60	
PLATE RESISTANCE (APPROX)	0.35	MEGOHM
GRID #1 IMPEDANCE AT 40MC	30000	OHMS ^C

^A 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 SERIES OPERATION OF HEATERS, EQUIPMENT SHOULD BE DESIGNED THAT AT NORMAL SUPPLY VOLTAGE BOGEY TUBES WILL OPERATE AT THIS VALUE OF HEATER CURRENT.

^C INPUT DAMPING OF TUBE AND TYPICAL CERAMIC SOCKET WITH BOTH CATHODE LEADS TIED DIRECTLY TO GROUND IS ABOUT 10,000 OHMS.





4EJ7

