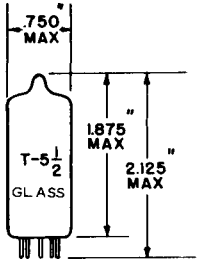
TUNG-SOL

PENTODE

MINIATURE TYPE

OUTLINE DRAWING
JEDEC 5-2



BASE 7 PIN BUTTON
JEDEC E7-1

FOR

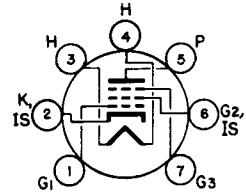
FM SOUND DETECTOR

SERVICE

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION

BASING DIAGRAM
JEDEC 7EN



BOTTOM VIEW

THE 6HZ6 IS A SHARP-CUTOFF PENTODE WITH DUAL CONTROL GRIDS IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR FM SOUND DETECTOR SERVICE.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE	0.023	pf
GRID 1 TO (K & I.S., G3, G2 & I.S., H)	8.2	pf
GRID 1 TO GRID 3	0.09	pf
GRID 3 TO PLATE	1.6	pf
GRID 3 TO (K&I.S., P, G2 & I.S., G1, H)	7.2	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	450	mA
HEATER WARM - UP TIME - AVERAGE		11	SECONDS
LIMITS OF APPLIED VOLTAGE - AC OR DC		6.3 ± .6	VOLTS
LIMITS OF SUPPLIED CURRENT - AC OR DC		450 ± 30	mA
PEAK HEATER - CATHODE VOLTAGE:			
HEATER POSITIVE WITH RESPECT TO CATHODE		200	VOLTS
DC COMPONENT		100	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		200	VOLTS

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MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

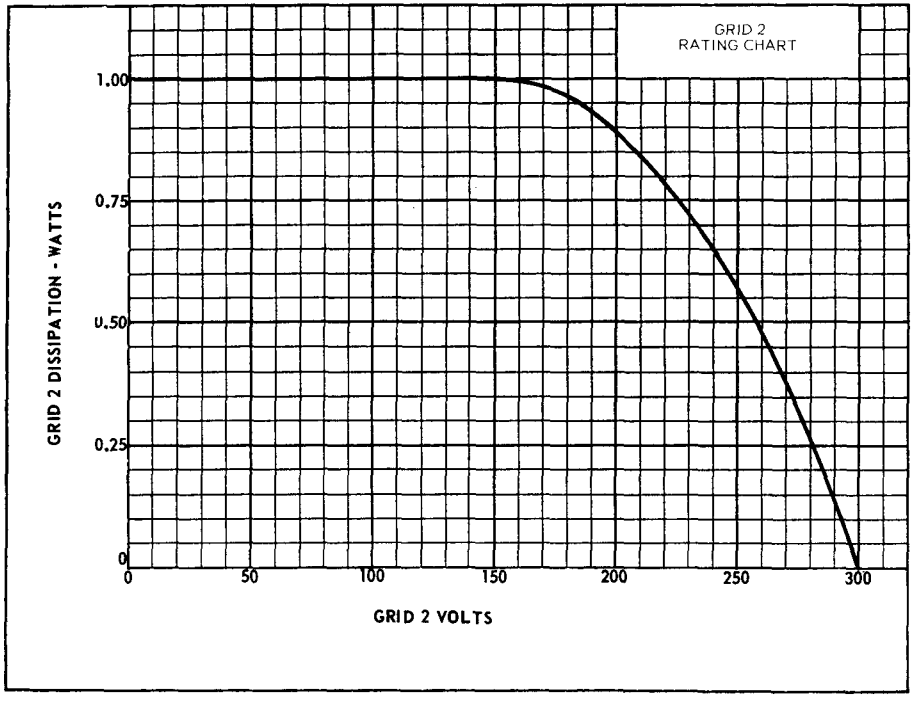
FM SOUND DETECTOR SERVICE

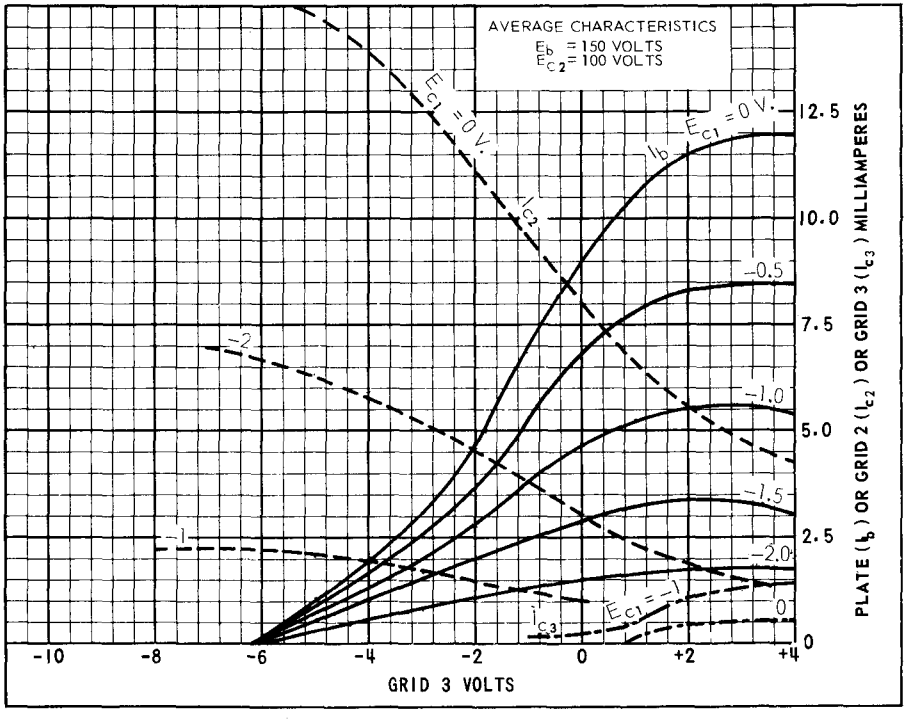
PLATE VOLTAGE		300	VOLTS
GRID 3 VOLTAGE:			
NEGATIVE VALUE - DC AND PEAK		100	VOLTS
POSITIVE VALUE - DC AND PEAK		25	VOLTS
GRID 2 SUPPLY VOLTAGE		300	VOLTS
GRID 2 VOLTAGE	SEE RATING CHART		
GRID 1 VOLTAGE:			
NEGATIVE - BIAS VALUE		50	VOLTS
POSITIVE - BIAS VALUE		0	VOLTS
GRID 3 INPUT		0.1	WATT
GRID 2 INPUT - UP TO 150 VOLTS		1	WATT
- BETWEEN 150 VOLTS AND 300 VOLTS	SEE RATING CHART		
PLATE DISSIPATION		1.7	WATTS
GRID 3 CIRCUIT RESISTANCE		0.68	MEGOHM
GRID 1 CIRCUIT RESISTANCE:			
FOR FIXED - BIAS OPERATION		0.22	MEGOHM
FOR CATHODE - BIAS OPERATION		0.47	MEGOHM

CHARACTERISTICS

CLASS A_1 AMPLIFIER

PLATE SUPPLY VOLTAGE		150	VOLTS
GRID 3 SUPPLY VOLTAGE		0	VOLTS
GRID 2 SUPPLY VOLTAGE		100	VOLTS
GRID 1 SUPPLY VOLTAGE		0	VOLTS
CATHODE RESISTOR		180	OHMS
PLATE CURRENT		3.2	mA
GRID 2 CURRENT		3.2	mA
TRANSCONDUCTANCE - GRID 1 TO PLATE		3,400	μMHOS
TRANSCONDUCTANCE - GRID 3 TO PLATE		600	μMHOS
PLATE RESISTANCE	APPROX.	0.11	MEGOHM
GRID 1 VOLTAGE FOR $I_b = 20\ \mu A$	APPROX.	−4.5	VOLTS
GRID 3 VOLTAGE FOR $I_b = 20\ \mu A$	APPROX.	−7	VOLTS





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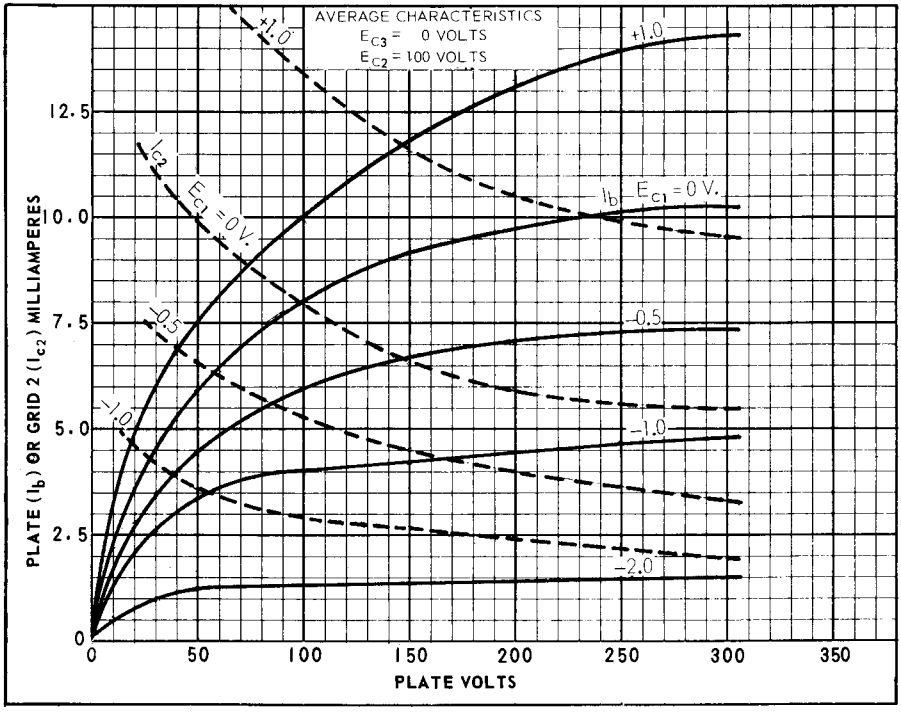
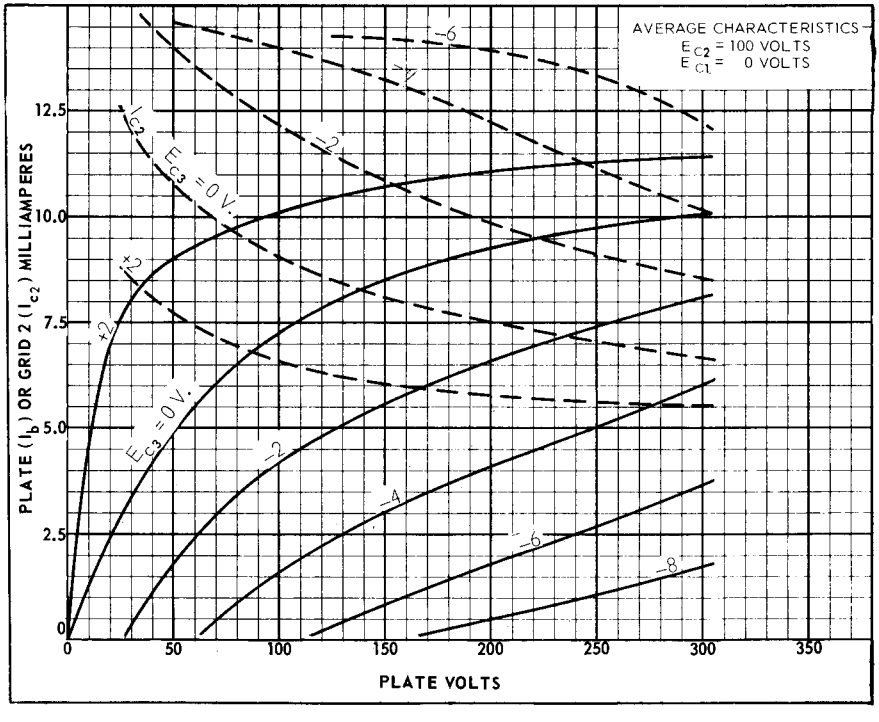
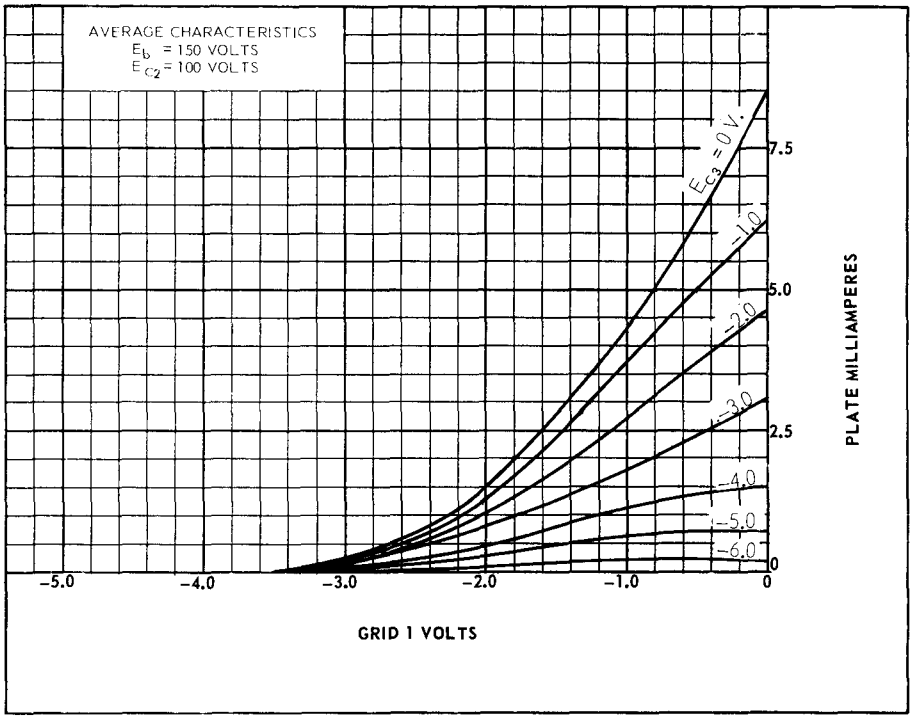
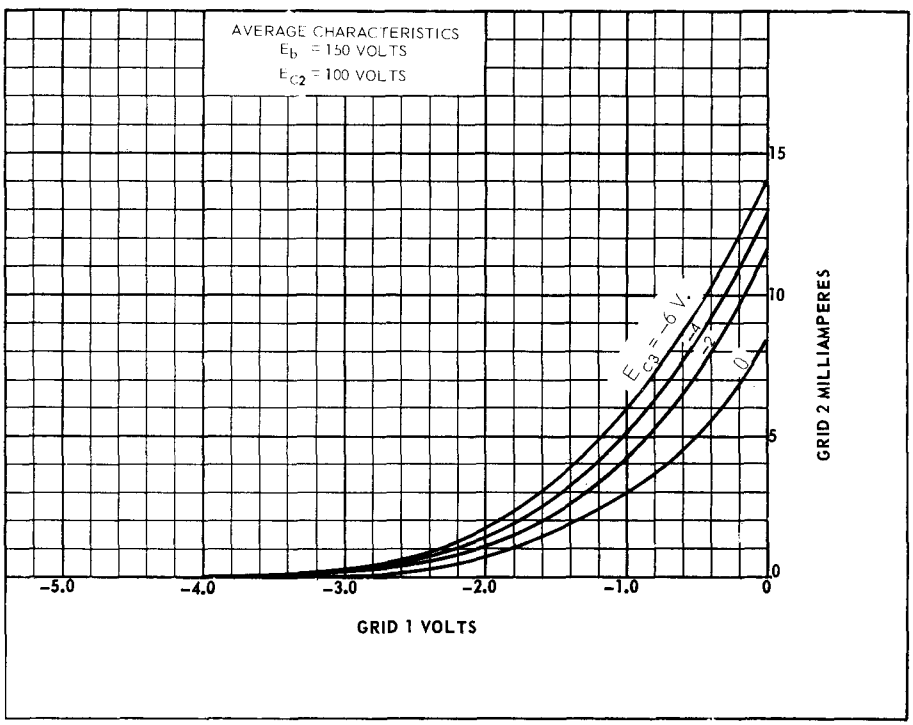
6HZ6


AVERAGE CHARACTERISTICS
E_{C3} = 0 VOLTS
E_{C2} = 100 VOLTS
+1.0
+1.0
I_{c2}
E_{c1} = 0 V.
I_b
E_{c1} = 0 V.
-0.5
-0.5
-1.0
-1.0
-2.0
PLATE (I_b) OR GRID 2 (I_{c2}) MILLIAMPERES
PLATE VOLTS
0
2.5
5.0
7.5
10.0
12.5
0
50
100
150
200
250
300
350


AVERAGE CHARACTERISTICS
E_{C2} = 100 VOLTS
E_{C1} = 0 VOLTS
-6
-4
-2
I_{c2}
E_{c3} = 0 V.
+2
+2
E_{c3} = 0 V.
-2
-4
-6
-8
PLATE (I_b) OR GRID 2 (I_{c2}) MILLIAMPERES
PLATE VOLTS
0
2.5
5.0
7.5
10.0
12.5
0
50
100
150
200
250
300
350





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