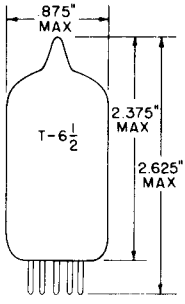
TUNG-SOL

TRIODE PENTODE

MINIATURE TYPE



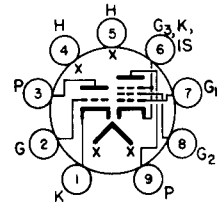
GLASS BULB
MINIATURE BUTTON
9 PIN BASE E9-1
OUTLINE DRAWING
JEDEC 6-3

COATED UNIPOTENTIAL CATHODE

FOR USE AS A SYNC SEPARATOR

AND VIDEO AMPLIFIER

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 9DX

THE 6LF8 IS A SHARP CUT-OFF PENTODE AND A HIGH MU TRIODE FEATURING A CONTROLLED PLATE KNEE CHARACTERISTIC FOR THE PENTODE SECTION. THE TRIODE SECTION MAY BE USED AS A SYNC SEPARATOR WHILE THE PENTODE SECTION IS DESIGNED TO SERVE AS A VIDEO AMPLIFIER.
THE 6LF8 IS SIMILAR TO THE 6AW8A.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD [A]	WITHOUT SHIELD	
PENTODE GRID 1 TO PENTODE PLATE (PG1 TO PP) MAX.	→ 0.05	→ 0.06	pf
PENTODE INPUT: PG TO (H+PG2+PK,G3,I.S.)	10	10	pf
PENTODE OUTPUT: PP TO (H+ PG2+PK,G3,I.S.)	4.5	3.6	pf
TRIODE GRID TO TRIODE PLATE: (TG TO TP)	2.2	2.2	pf
TRIODE INPUT: TG TO (H+TK=PK, PG3, I.S.)	3.4	3.2	pf
TRIODE OUTPUT: TP TO (H+TK=PK, PG3, I.S,)	3.0	1.8	pf
PENTODE GRID 1 TO TRIODE PLATE: (PG1 TO TP) MAX.	.005	.008	pf
PENTODE PLATE TO TRIODE PLATE: (PP TO TP) MAX.	.025	.150	pf

[A] EXTERNAL SHIELD 315 CONNECTED TO PIN 4 AND PIN 5.

CONTINUED ON FOLLOWING PAGE

→INDICATES A CHANGE.

CONTINUED FROM PRECEDING PAGE

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	600	MA.
HEATER WARM-UP TIME		11	SECONDS
LIMITS OF APPLIED VOLTAGE - AC OR DC		6.3 ± 0.6	VOLTS
LIMITS OF SUPPLIED CURRENT - AC OR DC		600 ± 40	MA.
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS

MAXIMUM RATINGS

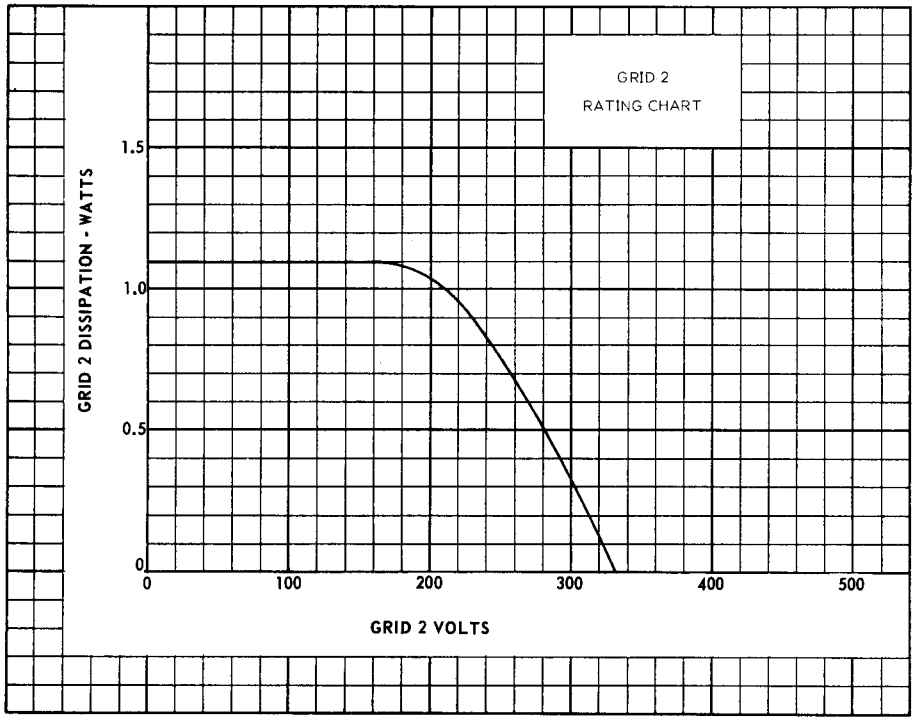
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

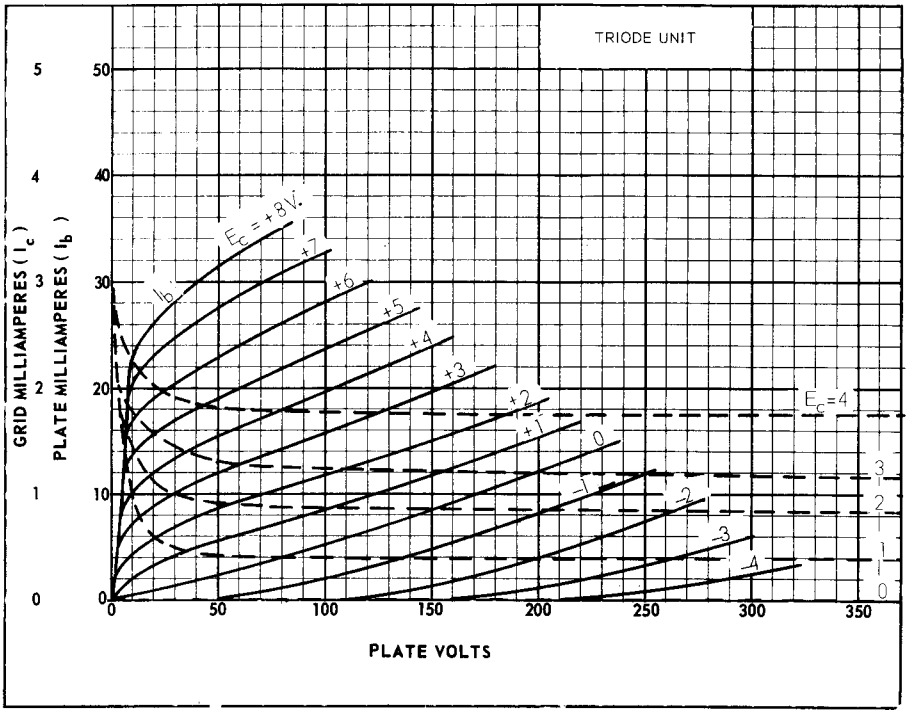
	TRIODE	PENTODE	
PLATE VOLTAGE	330	330	VOLTS
GRID 2 VOLTAGE	----	SEE RATING CHART	
GRID 2 SUPPLY VOLTAGE	----	330	VOLTS
PLATE DISSIPATION	1.1	3.75	WATTS
GRID 2 DISSIPATION UP TO 165 VOLTS		1.1	WATTS
POSITIVE DC GRID 1 VOLTAGE	4	0	VOLTS
NEGATIVE DC GRID 1 VOLTAGE	55	55	VOLTS
GRID 1 CIRCUIT RESISTANCE			
FOR CATHODE-BIAS OPERATION	1.0	1.0	MEGOHM
FOR FIXED BIAS OPERATION	0.5	0.25	MEGOHM

TYPICAL OPERATING CHARACTERISTICS

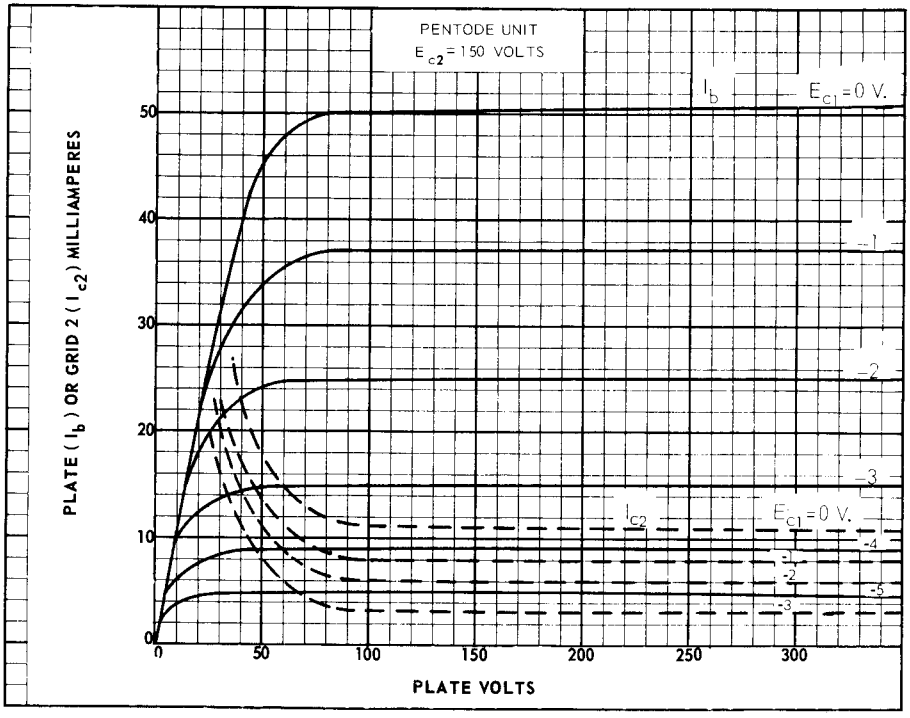
CLASS A1 AMPLIFIER

	TRIODE		PENTODE		
PLATE VOLTAGE	200	40	75	100	VOLTS
GRID 2 VOLTAGE	–	–	150	150	VOLTS
GRID 1 VOLTAGE	–2	+3	0	–2.5	VOLTS
PLATE CURRENT	4	11	50	20	MA.
GRID 1 CURRENT	0	2.7	0	0	MA.
GRID 2 CURRENT	–	–	12	5	MA.
TRANSCONDUCTANCE	4,000	4,000		11,000	μMHOS
AMPLIFICATION FACTOR	70	40	–	–	–
PLATE RESISTANCE (APPROX.)	17.5	10.0	–	200	KOHMS
GRID 1 VOLTAGE (APPROX.) FOR I_b = 20 μA	–5			–8	VOLTS


GRID 2
RATING CHART
GRID 2 DISSIPATION - WATTS
1.5
1.0
0.5
0
0
100
200
300
400
500
GRID 2 VOLTS


TRIODE UNIT
GRID MILLIAMPERES (I_c)
PLATE MILLIAMPERES (I_b)
5
4
3
2
1
0
50
40
30
20
10
0
E_c = +8 V.
+7
+6
+5
+4
+3
+2
+1
0
-1
-2
-3
-4
I_b
E_c = 4
3
2
1
0
0
50
100
150
200
250
300
350
PLATE VOLTS

6LF8


PENTODE UNIT
E_{c2} = 150 VOLTS
I_b
E_{c1} = 0 V.
-1
-2
-3
I_{c2}
E_{c1} = 0 V.
-1
-2
-3
-4
-5
PLATE (I_b) OR GRID 2 (I_{c2}) MILLIAMPERES
PLATE VOLTS
0
10
20
30
40
50
0
50
100
150
200
250
300