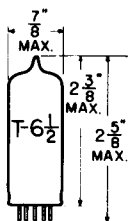


**TUNG-SOL****TRIODE-PENTODE**

MINIATURE TYPE

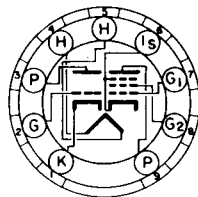
**GLASS BULB**

COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.75 AMP.  
AC OR DC

ANY MOUNTING POSITION

**BOTTOM VIEW**  
SMALL BUTTON  
9 PIN BASE

90X

THE 6CX8 IS A SHARP-CUTOFF PENTODE AND A MEDIUM-MU TRIODE IN THE 9 PIN MINIATURE CONSTRUCTION. THE PENTODE SECTION IS INTENDED PRIMARILY FOR USE AS A VIDEO AMPLIFIER. THE TRIODE SECTION IS SUITABLE FOR A 4.5 MEGA-CYCLE SOUND IF AMPLIFIER, SWEEP OSCILLATOR, SYNC SEPARATOR, SYNC AMPLIFIER, OR SYNC CLIPPER. EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 6CX8 IS IDENTICAL TO THE 8CX8.

**DIRECT INTERELECTRODE CAPACITANCES**  
WITHOUT EXTERNAL SHIELD**PENTODE SECTION:**

GRID #1 TO PLATE	0.06	$\mu\mu\text{f}$
INPUT	9.0	$\mu\mu\text{f}$
OUTPUT	4.4	$\mu\mu\text{f}$

**TRIODE SECTION:**

GRID TO PLATE	4.4	$\mu\mu\text{f}$
INPUT	2.2	$\mu\mu\text{f}$
OUTPUT	0.38	$\mu\mu\text{f}$

PENTODE GRID #1 TO TRIODE PLATE (MAX.)	.005	$\mu\mu\text{f}$
TRIODE GRID TO PENTODE PLATE (MAX.)	.018	$\mu\mu\text{f}$
PENTODE PLATE TO TRIODE PLATE (MAX.)	0.17	$\mu\mu\text{f}$

**RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

	PENTODE SECTION	TRIODE SECTION	
HEATER VOLTAGE	6.3 $\pm$ 10%	6.3 $\pm$ 10%	VOLTS
MAXIMUM PLATE VOLTAGE	330	330	VOLTS
MAXIMUM SCREEN-SUPPLY VOLTAGE	330	---	VOLTS
MAXIMUM SCREEN VOLTAGE	SEE RATING CHART		
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	0	VOLTS
MAXIMUM PLATE DISSIPATION	5.0	2.0	WATTS
MAXIMUM SCREEN DISSIPATION	1.1	---	WATTS

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

### RATINGS - CONT'D

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

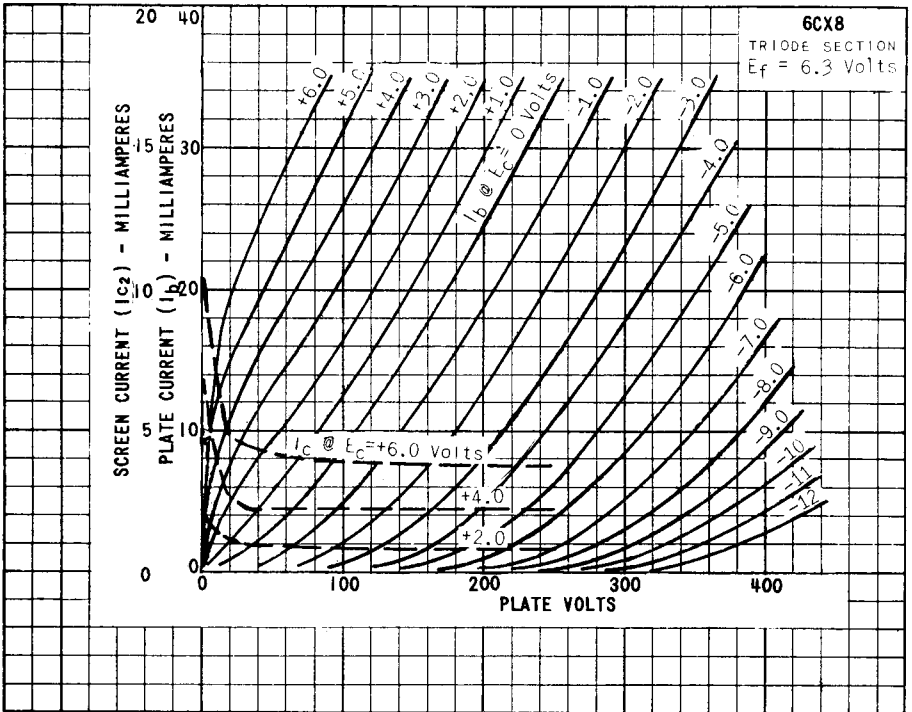
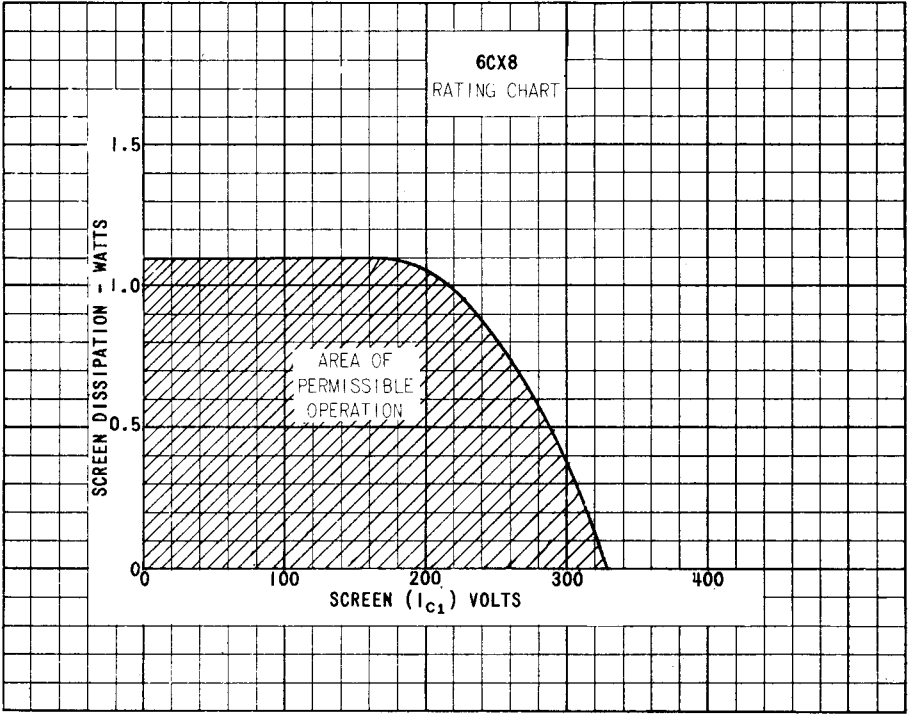
	PENTODE SECTION	TRIODE SECTION	
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT	100	100	VOLTS
TOTAL DC AND PEAK	200	200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK	200	200	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE			
WITH FIXED BIAS	0.25	0.5	MEG OHMS
WITH CATHODE BIAS	1.0	1.0	MEG OHMS
HEATER WARM-UP TIME (APPROX.)*	11.0		SECONDS

### TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

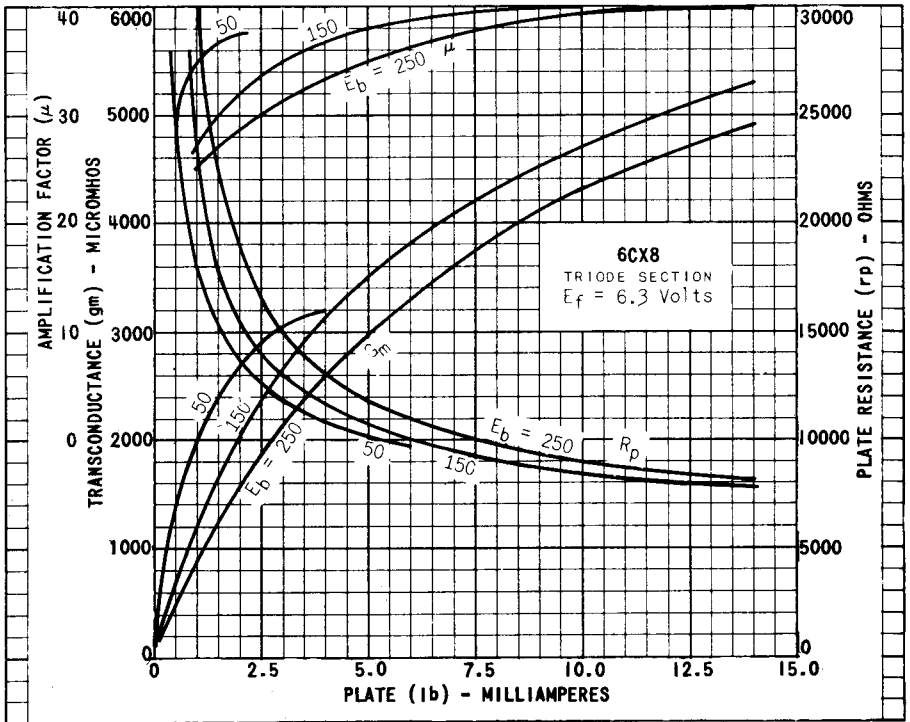
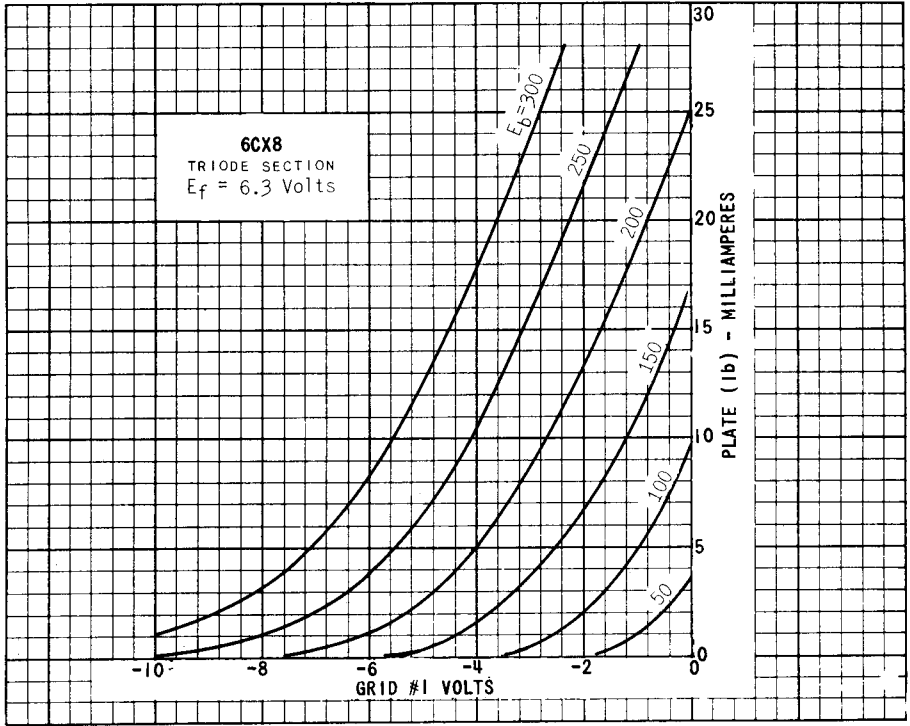
CLASS A<sub>1</sub> AMPLIFIER

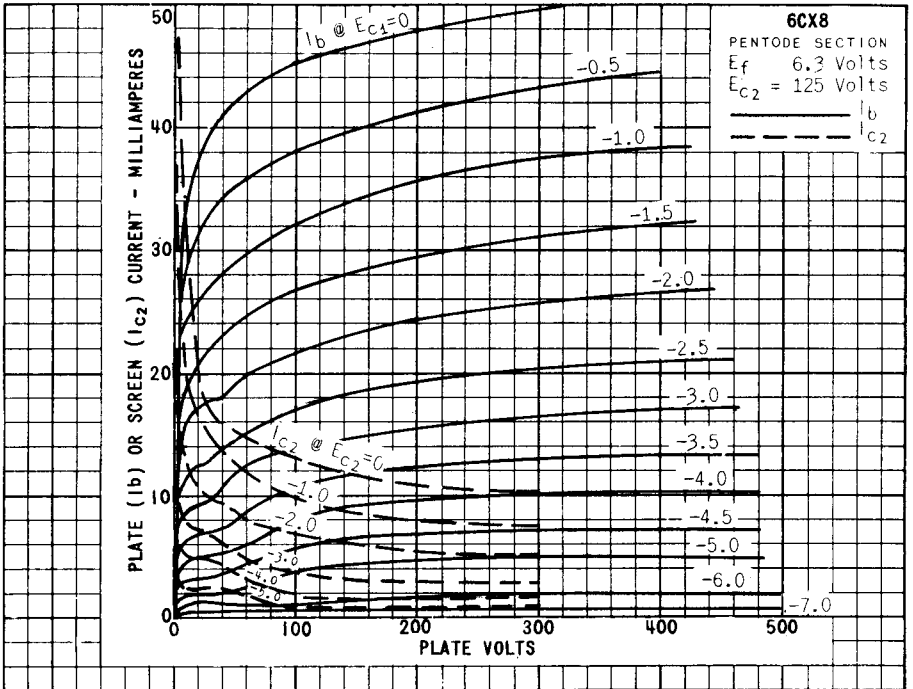
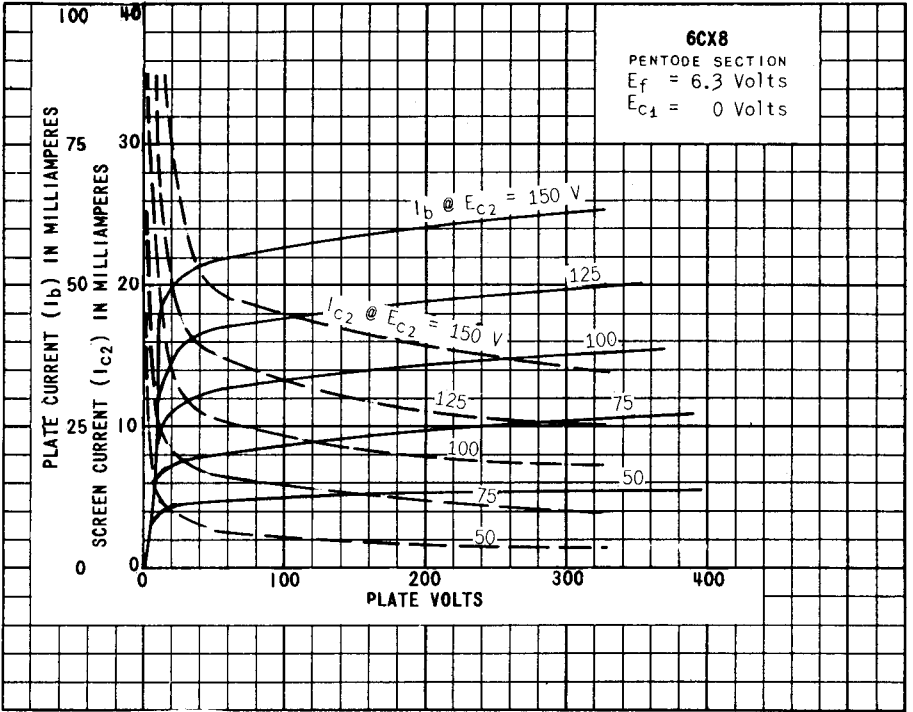
	PENTODE SECTION	PENTODE SECTION	TRIODE SECTION	
HEATER VOLTAGE	6.3±10%	6.3±10%	6.3±10%	VOLTS
HEATER CURRENT	0.75	0.75	0.75	AMP.
PLATE VOLTAGE	40	200	150	VOLTS
SCREEN VOLTAGE	125	125	---	VOLTS
GRID #1 VOLTAGE	0 <sup>A</sup>	---	---	VOLTS
CATHODE-BIAS RESISTOR	---	68	150	OHMS
AMPLIFICATION FACTOR	---	---	40	
PLATE RESISTANCE (APPROX.)	---	70 000	8 700	OHMS
TRANSCONDUCTANCE	---	10 000	4 600	μMHOS
PLATE CURRENT	40	24	9.2	MA.
SCREEN CURRENT	15.5	5.2	---	MA.
GRID #1 VOLTAGE (APPROX.)				
I <sub>b</sub> = 100μA.	---	-8.5	-5.0	VOLTS

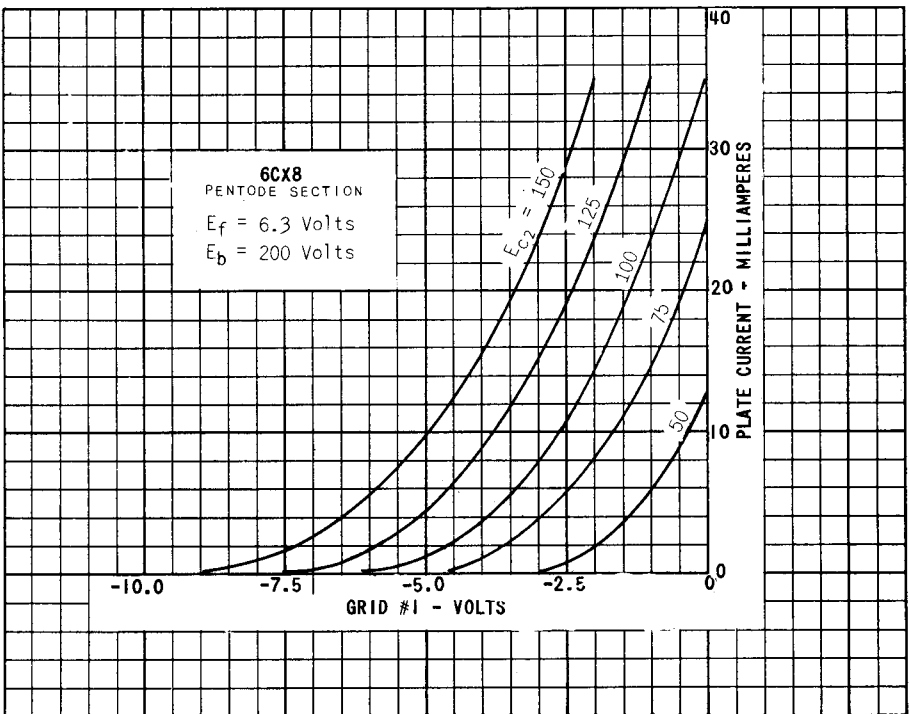
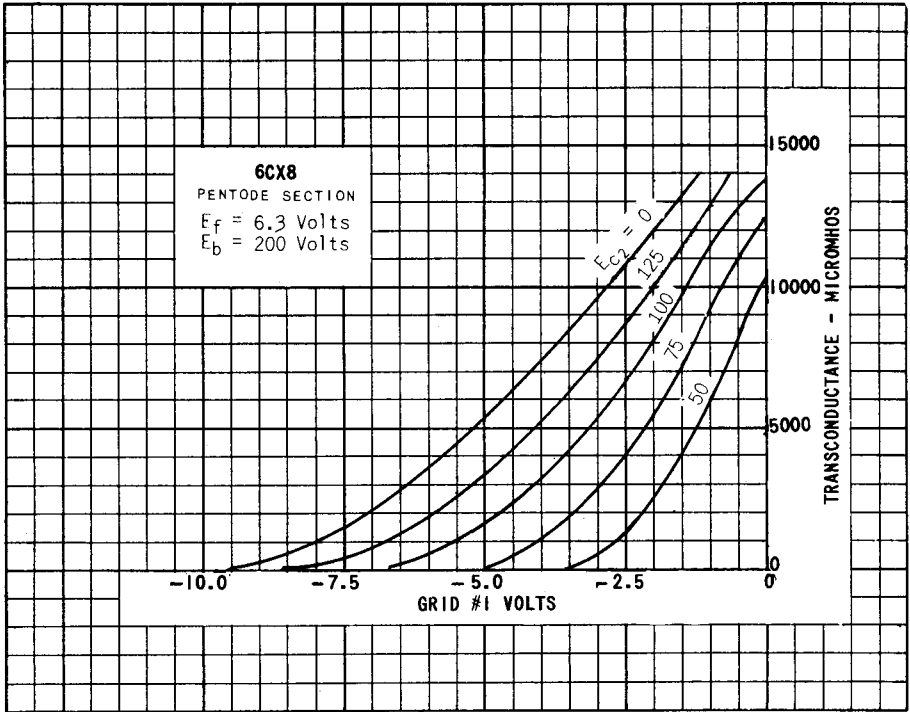
DESIGN-MAXIMUM RATINGS ARE THE LIMITING VALUES EXPRESSED WITH RESPECT TO BOGIE TUBES AT WHICH SATISFACTORY TUBE LIFE CAN BE EXPECTED TO OCCUR. TO OBTAIN SATISFACTORY CIRCUIT PERFORMANCE, THEREFORE, THE EQUIPMENT DESIGNER MUST ESTABLISH THE CIRCUIT DESIGN SO THAT NO DESIGN-MAXIMUM VALUE IS EXCEEDED WITH A BOGIE TUBE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.

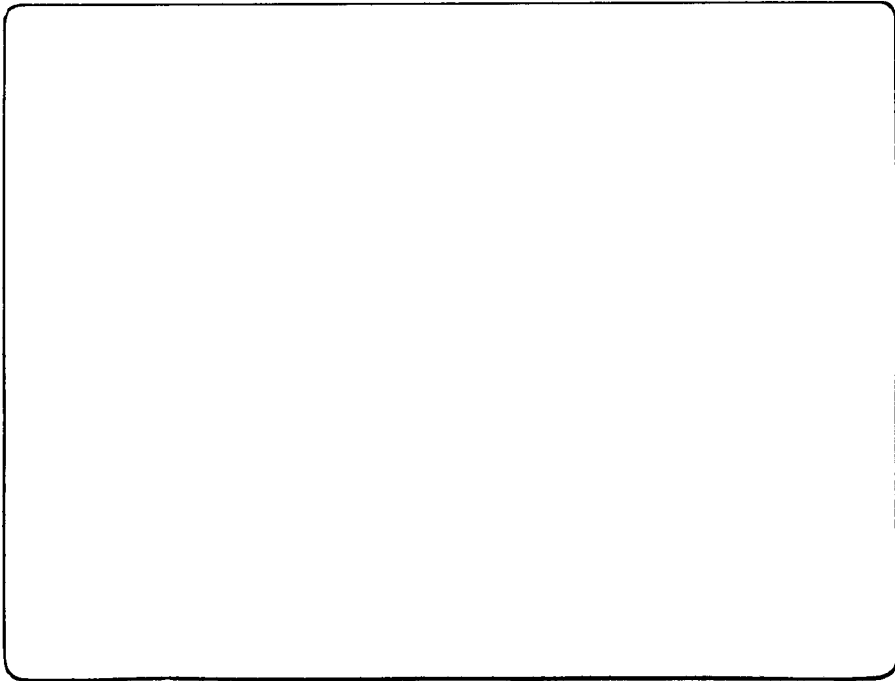
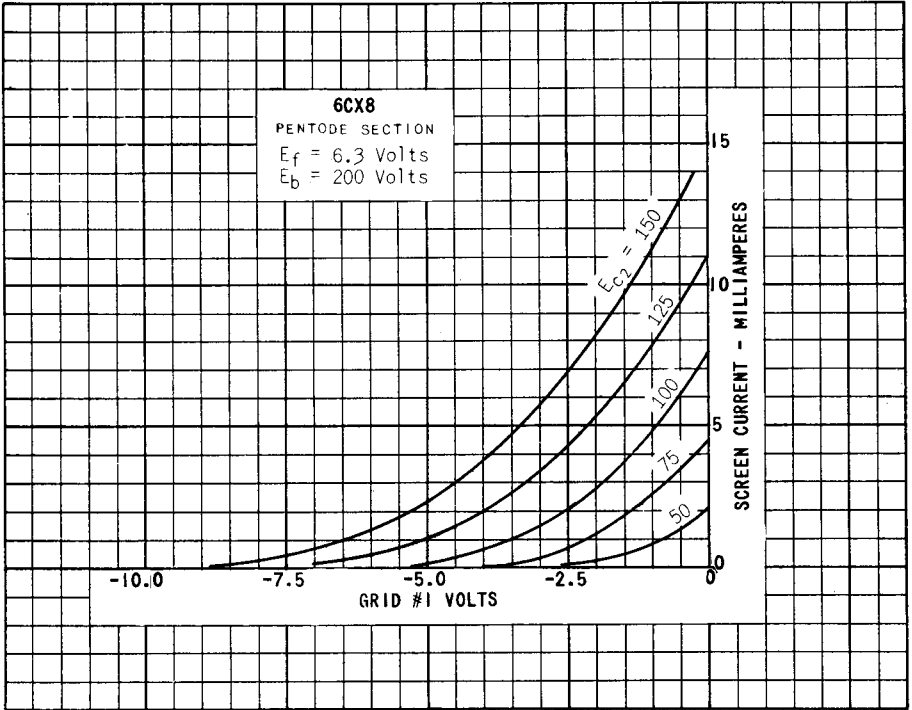


PRINTED IN U. S. A.









PRINTED IN U. S. A.