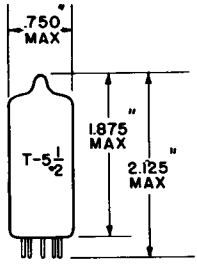
TUNG-SOL

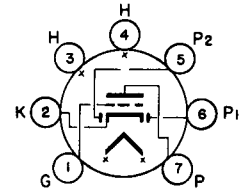


GLASS BULB
MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2

DOUBLE-DIODE TRIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE
VOLTAGE AMPLIFIER
AND
DETECTOR

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 7BT

THE 12BF6 IS A COMBINED LOW-MU VOLTAGE AMPLIFIER AND DOUBLE-DIODE DETECTOR USING THE 7 PIN MINIATURE CONSTRUCTION. THE LOW AMPLIFICATION FACTOR OF THE TRIODE PERMITS LARGE VALUES OF OUTPUT SIGNAL WITH LOW DISTORTION.

DIRECT INTERELECTRODE CAPACITANCES

	WITHOUT SHIELD	WITH[A] SHIELD	
TRIODE SECTION:			
GRID TO PLATE: (G TO TP)	1.9	1.9	pf
INPUT: G TO (H+K)	1.8	1.9	pf
OUTPUT: TP TO (H+K)	0.7	1.2	pf
DIODE SECTION:			
#1 DIODE PLATE TO GRID: (1DP TO G) MAX.	0.07	0.06	pf
#2 DIODE PLATE TO GRID: (2DP TO G) MAX.	0.06	0.05	pf
#2 DIODE PLATE TO HEATER AND CATHODE	0.95		pf
#1 DIODE PLATE TO HEATER AND CATHODE	0.66		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
CURRENT OPERATION		150±15	MA.
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE		90	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		90	VOLTS

[A] EXTERNAL SHIELD 316 CONNECTED TO PIN#2.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

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TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

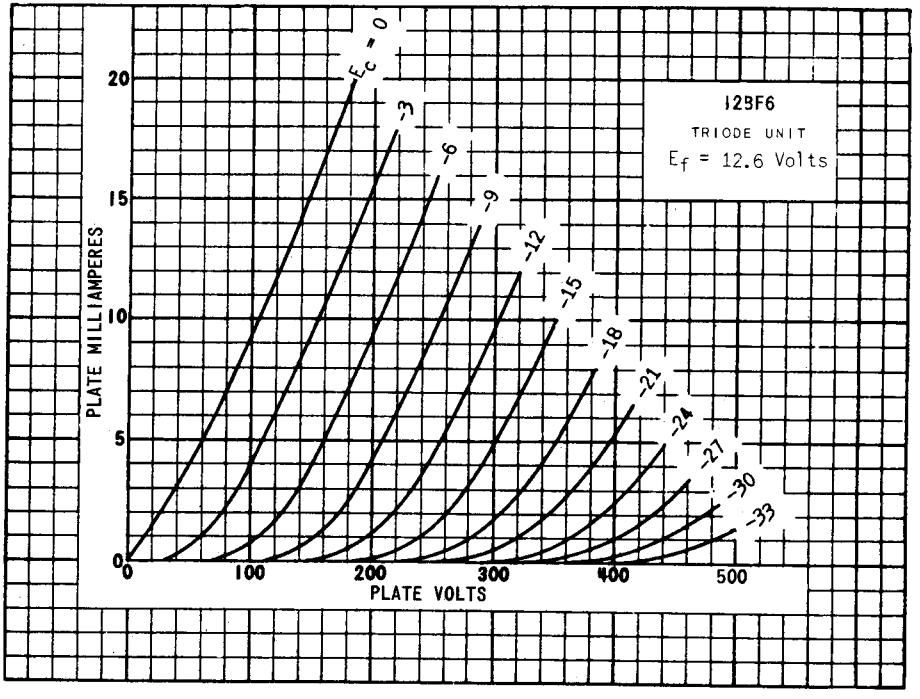
DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

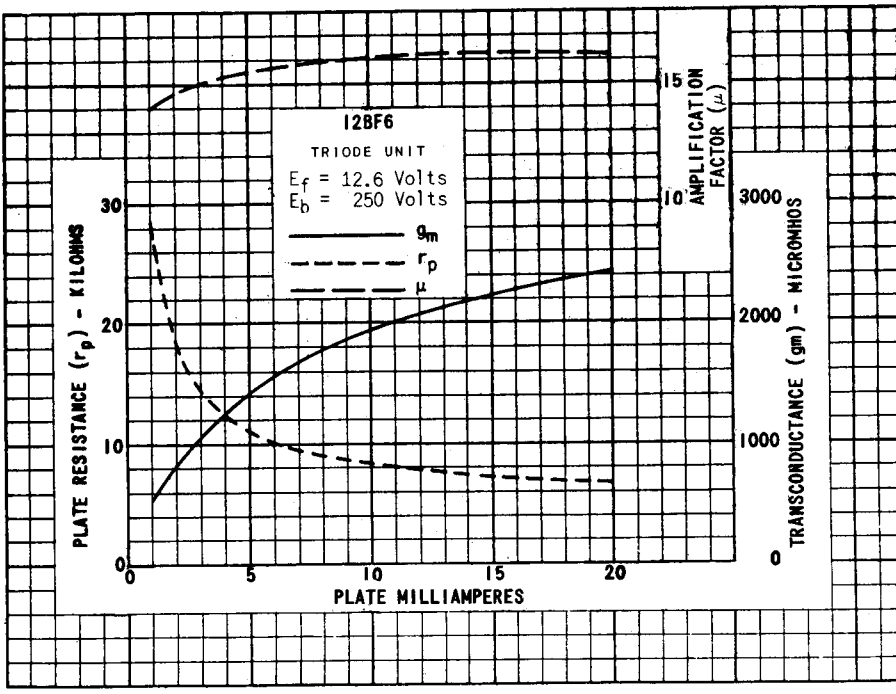
PLATE VOLTAGE	300	VOLTS
PLATE DISSIPATION	2.5	WATTS
AVERAGE DIODE CURRENT EACH UNIT FOR CONTINUOUS OPERATION	1.0	MA.

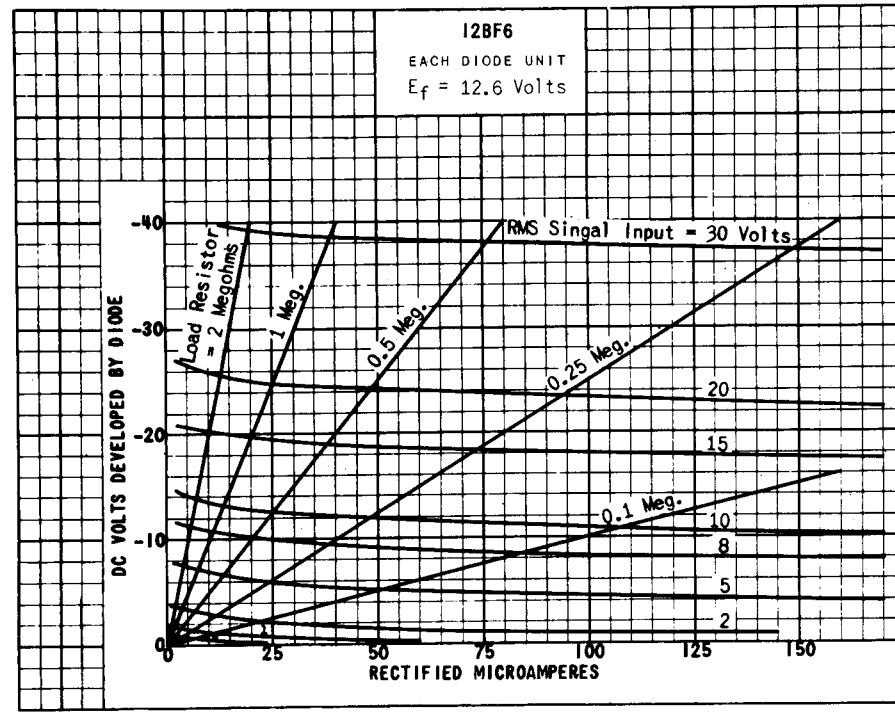
TYPICAL OPERATING CHARACTERISTICS

CLASS A_1 AMPLIFIER

PLATE VOLTAGE	250	VOLTS
GRID VOLTAGE	-9	VOLTS
PLATE RESISTANCE	8500	OHMS
TRANSCONDUCTANCE	1900	μMHOS
AMPLIFICATION FACTOR	16	
PLATE CURRENT	9.5	MA.
LOAD RESISTANCE	10000	OHMS
TOTAL HARMONIC DISTORTION	6.5	PERCENT
POWER OUTPUT	300	MW.
DIODE CURRENT EACH PLATE WITH 10 VOLTS DC APPLIED (MIN.)	0.8	MA.







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