

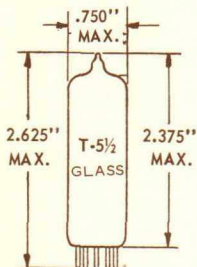
TUNG-SOL

BEAM PENTODE

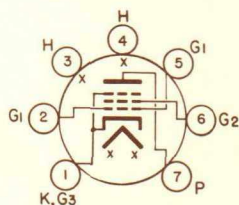
MINIATURE TYPE

OUTLINE DRAWING

JEDEC 5-3


 BASE 7 PIN BUTTON
JEDEC E7-1

 AUDIO OUTPUT PENTODE
HIGH POWER SENSITIVITY

 COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION
BASING DIAGRAM
JEDEC 7CV

BOTTOM VIEW

THE 12FX5 IS A BEAM POWER PENTODE USING THE 7 PIN MINIATURE CONSTRUCTION. BECAUSE OF ITS HIGH POWER SENSITIVITY AT LOW PLATE-SCREEN VOLTAGE, IT IS PARTICULARLY ADAPTABLE TO RECORD PLAYER APPLICATIONS.

 DIRECT INTERELECTRODE CAPACITANCES - APPROX.
WITHOUT EXTERNAL SHIELD

GRID TO PLATE: G_1 TO P	0.6	pf
INPUT: G_1 TO ($G_2 + G_3 + K + H$)	17	pf
OUTPUT: P TO ($G_2 + G_3 + K + H$)	9	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	12.6 VOLTS	450	MA.
HEATER WARM-UP TIME		11	SEC.
LIMITS OF SUPPLIED CURRENT - AC OR DC		450 $\pm$ 30	MA
MAXIMUM HEATER - CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

PLATE VOLTAGE	150	VOLTS
GRID #2 VOLTAGE	130	VOLTS
POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
PLATE DISSIPATION	5.5	WATTS
GRID #2 DISSIPATION	2	WATTS
GRID #1 CIRCUIT RESISTANCE:		
FIXED BIAS	0.1	MEGOHM
CATHODE BIAS	0.5	MEGOHM
BULB TEMPERATURE		
(AT HOTTEST POINT ON BULB SURFACE)	225	° C

CHARACTERISTICS

PLATE VOLTAGE	110	VOLTS
GRID 2 VOLTAGE	115	VOLTS
CATHODE BIAS RESISTOR	62	OHMS
PLATE CURRENT	36	MA
GRID 2 CURRENT	10	MA
TRANSCONDUCTANCE	13,500	μ MHOS
PLATE RESISTANCE - APPROX.	17,500	OHMS

TYPICAL OPERATING CONDITIONS

CLASS A₁ AMPLIFIER

PLATE VOLTAGE	110	VOLTS
GRID #2 VOLTAGE	115	VOLTS
CATHODE BIAS RESISTOR - BY PASSED	62	OHMS
PEAK AF GRID #1 VOLTAGE	3	VOLTS
MAXIMUM SIGNAL PLATE CURRENT	35	MA
MAXIMUM SIGNAL GRID #2 CURRENT	12	MA
LOAD RESISTANCE	3,000	OHMS
TOTAL HARMONIC DISTORTION	8	PERCENT
MAXIMUM SIGNAL POWER OUTPUT	1.3	WATTS