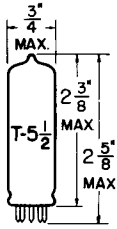
TUNG-SOL

PENTODE

MINIATURE TYPE



GLASS BULB

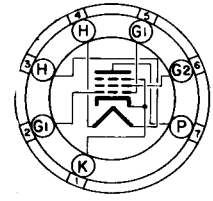
UNIPOTENTIAL CATHODE

HEATER

60±10% VOLTS 0.1 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

SMALL-BUTTON MINIATURE
7 PIN BASE
7CV

THE 6OFX5 IS A POWER PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE IN THE OUTPUT STAGES OF AUDIO AMPLIFIERS DESIGNED TO OPERATE FROM TRANSFORMERLESS AC OR AC/DC POWER SUPPLIES. THE 6OFX5 IS PARTICULARLY SUITABLE FOR USE IN TWO-TUBE SERIES-STRING STEREO-AMPLIFIER SYSTEMS.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE	0.65	μμf
GRID #1 TO CATHODE & GRID #3, GRID #2 & HEATER	17	μμf
PLATE TO CATHODE & GRID #3, GRID #2 & HEATER	9	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM[B]

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	60±10%	VOLTS
MAXIMUM PLATE VOLTAGE	150	VOLTS
MAXIMUM GRID #2 (SCREEN-GRID) VOLTAGE	130	VOLTS
MAXIMUM GRID #1 (CONTROL-GRID) VOLTAGE:		
POSITIVE-BIAS VALUE	0	VOLTS
MAXIMUM PLATE DISSIPATION	5.5	WATTS
MAXIMUM GRID #2 INPUT	2	WATTS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	200[A]	VOLTS
BULB TEMPERATURE (AT HOTTEST POINT ON BULB SURFACE)	225	°C
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
FOR FIXED-BIAS OPERATION	0.1	MEGOHM
FOR CATHODE-BIAS OPERATION	0.5	MEGOHM

CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	60±10%	VOLTS
HEATER CURRENT	0.1	AMP.
PLATE-SUPPLY VOLTAGE	110	VOLTS
GRID #2 SUPPLY VOLTAGE	115	VOLTS
CATHODE RESISTOR	62	OHMS
PLATE RESISTANCE (APPROX.)	17 500	OHMS
TRANSCONDUCTANCE	13 500	μMHOS
PLATE CURRENT	36	MA.
GRID #2 CURRENT	10	MA.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATION

HEATER VOLTAGE	60±10%	VOLTS
HEATER CURRENT	0.1	AMP.
PLATE SUPPLY VOLTAGE	110	VOLTS
GRID #2 SUPPLY VOLTAGE	115	VOLTS
CATHODE RESISTOR	62	OHMS
PEAK AF GRID #1 VOLTAGE	3	VOLTS
ZERO-SIGNAL PLATE CURRENT	36	MA.
MAX.-SIGNAL PLATE CURRENT	35	MA.
ZERO-SIGNAL GRID #2 CURRENT	10	MA.
MAX.-SIGNAL GRID #2 CURRENT	12	MA.
LOAD RESISTANCE	3 000	OHMS
TOTAL HARMONIC DISTORTION	8	PERCENT
MAX.-SIGNAL POWER OUTPUT	1.3	WATTS

[A] THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

[B] DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.