

# DUAL PENTODE

COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 1.2 AMP.

AC OR DC

ANY MOUNTING POSITION



#### BOTTOM VIEW

SHORT MEDIUM SHELL 8 PIN OCTAL

8 J P

### **GLASS BULB**

THE 6DY7 IS A DUAL BEAM POWER PENTODE IN THE 8 PIN OCTAL CONSTRUCTION. IT IS DESIGNED FOR APPLICATION IN STEREOPHONIC SOUND SYSTEMS.

#### RATINGS INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEMA EACH SECTION

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM PLATE VOLTAGE	400	VOLTS
MAXIMUM GRID #2 VOLTAGE	300	VOLTS
MAXIMUM PLATE DISSIPATION	15	WATTS
MAXIMUM GRID #2 DISSIPATION	2.0	WATTS
MAXIMUM GRID #1 C!RCUIT RES!STANCE		
FIXED BIAS	0.1	медонм
SELF BIAS	0.47	MEGOHM
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER POSITIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

AVERAGE CHARACTERISTICS - EACH SECTION

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	1.2	AMPS.
PLATE VOLTAGE	250	VOLTS
GRID #2 VOLTAGE	250	VOLTS
GRID #1 VOLTAGE	-12.5	VOLTS
PLATE CURRENT	50	MA.
GRID #2 CURRENT	3.0	MA.
TRANSCONDUCTANCE	6 000	$\mu$ MHOS
PLATE RESISTANCE (APPROX.)	28 000	OHMS

CONTINUED ON FOLLOWING PAGE

# TUNG-SOL -

CONTINUED FROM PRECEDING PAGE

# TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CONTID.

CLASS AB, AMPLIFIER (TWO SECTIONS IN PUSH-PULL)

HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	1.2	1.2	AMP.
PLATE VOLTAGE	250	400	VOLTS
GRID #2 VOLTAGE	250	250	VOLTS
GRID #1 VOLTAGE	-16	-20	VOLTS
PEAK AF GRID TO GRID VOLTAGE	32	40	VOLTS
ZERO SIGNAL PLATE CURRENT	77	58	MA.
MAXIMUM SIGNAL PLATE CURRENT	74	74	MA.
ZERO SIGNAL GRID #2 CURRENT	3.5	1.7	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	15.5	14.0	MA.
LOAD RESISTANCE (PLATE TO PLATE)	9 000	14 000	OHMS
MAXIMUM SIGNAL POWER OUTPUT	11	20	WATTS
TOTAL HARMONIC DISTORTION	2.5	2.0	PERCENT

# CLASS A1 - SINGLE SECTION B

PLATE VOLTAGE	250	VOLTS
GRID #2 VOLTAGE	250	VOLTS
GRID #4 VOLTAGE	-12.5	VOLTS
PEAK AF SIGNAL VOLTAGE	12.5	VOLTS
ZERO SIGNAL PLATE CURRENT	50	MA.
MAXIMUM SIGNAL PLATE CURRENT	45	MA.
ZERO SIGNAL GRID #2 CURRENT	3.0	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	9.0	MA.
LOAD RESISTANCE	5 000	OHMS
MAXIMUM SIGNAL POWER OUTPUT	5.0	WATTS
TOTAL HARMONIC DISTORTION	9.0	PERCENT

A DESIGN-MAXIMUM RATINGS ARE LIMITIMG VALUES OF OPERATING AND ENVIRONMENTAL COMDITIONS APPLICABLE TO A BOSEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE COMDITIONS. THE DEVICE MANUFACTURE CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABELLITY 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 ITE NO DESIGN-MAXIMM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOSEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

 $<sup>^{\</sup>rm B}$  The effects of cross-coupling between sections, with both sections operating simultaneously as single channel class at amplifiers, is 50 db down.