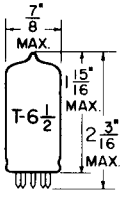
TUNG-SOL

DOUBLE TRIODE

MINIATURE TYPE

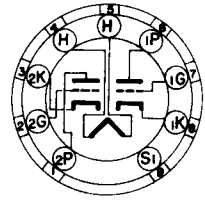


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
4.2 VOLTS 0.6 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
9 PIN BASE
9AJ

THE 4BZ7 IS A MEDIUM-MU DOUBLE TRIODE USING THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE IN 600 MA. SERIES HEATER OPERATED RECEIVERS AND IS INTENDED FOR SERVICE IN LOW NOISE VHF CASCODE AMPLIFIER APPLICATIONS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED. WITH THE EXCEPTION OF HEATER RATINGS, ITS CHARACTERISTICS ARE IDENTICAL TO THE 6BZ7.

DIRECT INTERELECTRODE CAPACITANCES

WITH RETMA SHIELD #315

	TRIODE UNIT #1		TRIODE UNIT #2	
GRID TO PLATE	1.15		1.15	μμf
INPUT	2.85		---	μμf
INPUT (GROUNDED GRID)	---		4.95	μμf
OUTPUT	1.35		---	μμf
OUTPUT (GROUNDED GRID)	---		2.27	μμf
PLATE TO CATHODE (MAX.)	0.15		0.15	μμf
HEATER TO CATHODE	2.20		2.30	μμf
PLATE UNIT #1 TO PLATE UNIT #2 (MAX.)		0.01		μμf
PLATE UNIT #2 TO PLATE & GRID UNIT #1 (MAX.)		0.024		μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

EACH TRIODE UNIT

HEATER VOLTAGE	4.2	VOLTS
MAXIMUM HEATER CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		VOLTS
TOTAL DC AND PEAK	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	250	VOLTS
MAXIMUM PLATE DISSIPATION	2	WATTS
MAXIMUM CATHODE CURRENT	20	MA.
HEATER WARM-UP TIME (APPROX.)*	11.0	SECONDS

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

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CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER – EACH TRIODE UNIT

HEATER VOLTAGE	4.2	VOLTS
HEATER CURRENT	0.6	AMP.
PLATE VOLTAGE	150	VOLTS
CATHODE BIAS RESISTOR	220	OHMS
AMPLIFICATION FACTOR	38	
PLATE RESISTANCE	5 600	OHMS
TRANSCONDUCTANCE	6 800	µMHOS
PLATE CURRENT	10	MA.
GRID VOLTAGE FOR PLATE CURRENT OF 10 MA. (APPROX.)	11	VOLTS