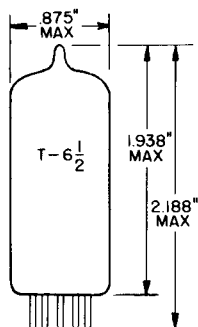


## TUNG-SOL

## DOUBLE TRIODE

## MINIATURE TYPE



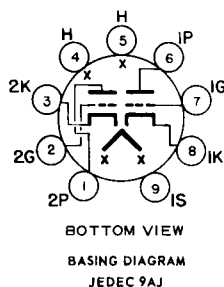
GLASS BULB

MINIATURE BUTTON  
9 PIN BASE E9-1  
OUTLINE DRAWING  
JEDEC 6-2

FOR USE AS  
VHF VOLTAGE AMPLIFIER

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



THE 6BQ7 COMBINES TWO INDEPENDENT MEDIUM-MU INDIRECTLY HEATED CATHODE TYPE TRIODES IN THE 9 PIN MINIATURE CONSTRUCTION. LOW INTERELECTRODE CAPACITANCES, HIGH TRANSCONDUCTANCE AND SHIELDING BETWEEN THE TWO SECTIONS ADAPT IT FOR USE IN THE GROUNDED-CATHODE INPUT/GROUNDED-GRID OUTPUT OR CASCODE CIRCUIT PROVIDING LOW TUBE NOISE AND GOOD STABILITY AS A VHF VOLTAGE AMPLIFIER.

→ DIRECT INTERELECTRODE CAPACITANCES<sup>A</sup>

	#1 TRIODE	#2 TRIODE	
GRID TO PLATE: (G TO P)	1.15	1.15	pf
PLATE TO CATHODE: (P TO K) MAX.	0.15	0.15	pf
HEATER TO CATHODE: (H TO K)	2.20	2.30	pf
#1 TRIODE INPUT: G TO (H + K + I.S.)	2.85	-----	pf
#2 TRIODE INPUT: K TO (H + G + I.S.) <sup>B</sup>	-----	4.95	pf
#1 TRIODE OUTPUT: P TO (H + K + I.S.)	1.35	-----	pf
#2 TRIODE OUTPUT: P TO (H + G + I.S.) <sup>B</sup>	-----	2.27	pf
#1 TRIODE PLATE TO #2 TRIODE PLATE: (1P TO 2P) MAX.		0.010	pf
#2 TRIODE PLATE TO #1 TRIODE PLATE & GRID: (2P TO 1P + 1G) MAX.		0.024	pf

## HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3	VOLTS	400	MA.
HEATER SUPPLY LIMITS: VOLTAGE OPERATION			6.3 ± 0.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE: HEATER NEGATIVE WITH RESPECT TO CATHODE <sup>C</sup>			200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			200	VOLTS

CONTINUED ON FOLLOWING PAGE

**TUNG-SOL**

CONTINUED FROM PRECEDING PAGE

**MAXIMUM RATINGS**

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

PLATE VOLTAGE <sup>C</sup>	250	VOLTS
PLATE DISSIPATION	2	WATTS
CATHODE CURRENT	20	MA.
GRID CIRCUIT RESISTANCE *	0.5	MEGOHM

**TYPICAL OPERATING CHARACTERISTICS**CLASS A<sub>1</sub> AMPLIFIER - EACH UNIT

PLATE VOLTAGE	150	VOLTS
CATHODE BIAS RESISTOR	220	OHMS
PLATE CURRENT	9	MA.
AMPLIFICATION FACTOR	35	
TRANSCONDUCTANCE	6000	μMHOS
PLATE RESISTANCE	5800	OHMS
GRID VOLTAGE (APPROX.) FOR I <sub>b</sub> = 10 μA	-10	VOLTS

A  
EXTERNAL SHIELD 315 CONNECTED TO CATHODE

B  
READ AS GROUNDED GRID AMPLIFIER.

C  
THIS RATING MAY BE AS HIGH AS 300 VOLTS UNDER CUTOFF CONDITIONS, IN GROUNDED-GRID CIRCUIT WITH DIRECT COUPLED DRIVE.

\* INDICATES AN ADDITION

→ INDICATES A CHANGE.