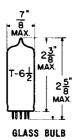
#### TUME-SOL

# TRIODE PENTODE MINIATURE TYPE



COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.75 AMPAC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
9 PIN BASE
90X

THE 6EB8 IS A HIGH-MU TRIODE AND SHARP CUTOFF PENTODE IN THE 9 PIN-MINIATURE CONSTRUCTION. THE TRIODE SECTION IS DESIGNED FOR USE AS A VOLTAGE AMPLIFIER WHILE THE PENTODE SECTION HAS A CONTROLLED PLATE KNEE CHARACTERISTIC AND IS DESIGNED FOR USE AS A VIDEO AMPLIFIER.

### DIRECT INTERELECTRODE CAPACITANCES WITHOUT EXTERNAL SHIELD

TRIODE SECTION:		
GRID TO PLATE	4.4	µµ f
INPUT: G TO (H + K)	2.4	μμ f
OUTPUT: P TO(H + K)	0.36	μμ f
PENTODE SECTION:		
GRID #4 TO PLATE (MAX.)	0.1	µµ f
INPUT: G4 TO (H+K+G2+G3+1.S.)	11	μμ f
OUTPUT: P TO (H+K+G2+G3+1.S.)	4.2	<i>µµ</i> f
COUPLING:		
TRIODE GRID TO PENTODE PLATE (MAX.)	.018	µµ f
PENTODE GRID #1 TO TRIODE PLATE (MAX.)	•005	μμ f
PENTODE PLATE TO TRIODE PLATE (MAX.)	0.17	μμf

### RATINGS INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM<sup>A</sup>

	TRIODE Section	PENTODE Section	
HEATER VOLTAGE	6.3	6.3	VOLTS
MAXIMUM PLATE VOLTAGE	330	330	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE		330	VOLTS
MAXIMUM GRID #2 VOLTAGE			
MAXIMUM POSITIVE GRID #1 VOLTAGE	0	0	VOLTS
MAXIMUM PLATE DISSIPATION	1.0	5.0	WATTS
MAXIMUM GRID #2 DISSIPATION		1.1	WATTS

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#### - TUNG-SOL .

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## $\begin{array}{c} \textbf{RATINGS -} \textbf{CONT}^{\intercal}\textbf{D.} \\ \textbf{INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM} \end{array}$

MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT T	O CATHODE		
TOTAL DC AND PEAK	2	200	VOLTS
HEATER POSITIVE WITH RESPECT T	O CATHODE		
DC	3	.00	VOLTS
TOTAL DC AND PEAK	2	200	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTAN	CE		
FIXED BIAS	0.5	0.25	MEGOHM
CATHODE BIAS	1.0	1.0	MEGOHM

### TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

	TRIODE Section	PENTO: Section	
HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	0.75	0.75	AMP.
PLATE VOLTAGE	250	200	VOLTS
GRID #2 VOLTAGE		125	VOLTS
GRID #1 VOLTAGE	-2		VOLTS
CATHODE BIAS RESISTOR		68	OHMS
PLATE CURRENT	2	25	MA.
GRID #2 CURRENT		7	MA.
TRANSCONDUCTANCE	2 7.00	12 500	μMHOS
AMPL BEICATION FACTOR	100		
PLATE RESISTANCE (APPROX.)	37 000	75 000	OHMS
GRID #1 VOLTAGE FOR $I_b$ = 100 $\mu$ A (APPROX.)		-9	VOLTS
GRID #4 VOLTAGE FOR In= 20 A (APPROX.)	F <sub>2</sub>		

#### PLATE KNEE CHARACTERISTICS - INSTANTANEOUS VALUES

$E_b = 45$ VOLTS, $E_{c2} = 125$ VOLTS AND $E_{c4} = 0$ VOLTS		
PLATE CURRENT	40	MA.
GRID #2 CURRENT	15	MA.

DESIGN-MAXIMUM RATINGS ARELIMITING 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 SERVICEOSILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING ROUITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT THE MORST PROBABLE OPERATING CONDITIONS WITH RESPONSIBLE WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, COULPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.