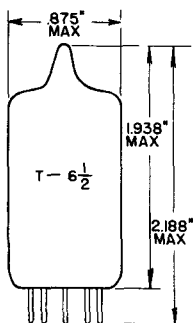


TUNG-SOL

DOUBLE TRIODE

MINIATURE TYPE



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

COATED UNIPOTENTIAL CATHODE

HEATER

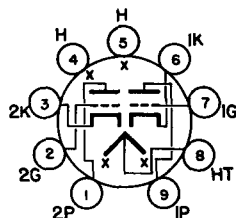
SERIES
12.6 VOLTS
450 MA.

PARALLEL
6.3 VOLTS
900 MA.

AC OR DC

ANY MOUNTING POSITION

FOR 12.6 VOLT OPERATION APPLY HEATER
VOLTAGE BETWEEN PINS #4 AND #5. FOR
6.3 VOLT OPERATION APPLY HEATER VOLTAGE
BETWEEN PIN #8 AND PINS #4 AND #5
CONNECTED TOGETHER.



BOTTOM VIEW
BASING DIAGRAM
JEDEC 9H

THE 5687 IS A GENERAL PURPOSE MEDIUM-MU DOUBLE TRIODE USING THE 9 PIN BUTTON ALL-GLASS CONSTRUCTION. EACH TRIODE IS ELECTRICALLY INDEPENDENT ALTHOUGH THE TWO HEATERS HAVE A COMMON CONNECTION. THE TUBE IS CHARACTERIZED BY HIGH PERVEANCE AND HIGH EMISSION CAPABILITIES.

DIRECT INTERELECTRODE CAPACITANCES

WITH NO EXTERNAL SHIELD

EACH TRIODE UNIT

GRID TO PLATE: (G TO P)	4.0	pf
GRID TO CATHODE: (G TO K+H)	4.0	pf
PLATE TO CATHODE: (P TO K+H)		
SECTION #1	0.6	pf
SECTION #2	0.5	pf
HEATER TO CATHODE: (H TO K)	7.0	pf
PLATE TO PLATE: (1P TO 2P) APPROX.	0.75	pf
GRID TO GRID: (1G TO 2G) APPROX.	0.025	pf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM INVERSE PLATE VOLTAGE	1000	VOLTS
MAXIMUM PLATE DISSIPATION (EACH UNIT)	4.2	WATTS
MAXIMUM TOTAL PLATE DISSIPATION (BOTH UNITS)	7.5	WATTS
MAXIMUM BULB TEMPERATURE (AT ANY PART OF ENVELOPE)	220	°C
MAXIMUM DC GRID CURRENT (EACH UNIT)	6	MA.
MAXIMUM EXTERNAL GRID CIRCUIT RESISTANCE (EACH UNIT)	1	MEG OHM

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICSCLASS A₁ AMPLIFIER - EACH UNIT

				VOLTS
PLATE VOLTAGE	120	180	250	AMP.
GRID VOLTAGE	-2	-7	-12.5	VOLTS
PLATE CURRENT	36.0	23.0	12.0	VOLTS
PLATE RESISTANCE (APPROX.)	1 560	2 000	3 000	MA.
TRANSCONDUCTANCE	11 500	8 500	5 400	OHMS
AMPLIFICATION FACTOR	18.0	17.0	16.0	μMHOS
GRID VOLTAGE FOR				
$I_b = 100 \mu A.$ (APPROX.)	-9.0	-14.0	-19.0	VOLTS

