

TUNG-SOL

DOUBLE-DIODE-TRIODE

MINIATURE TYPE

HIGH PERVEANCE DOUBLE DIODE

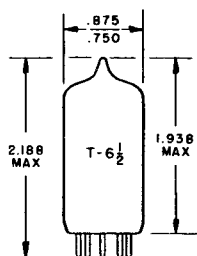
AND HIGH MU TRIODE

FOR

MOBILE COMMUNICATIONS EQUIPMENT

COATED UNIPOTENTIAL CATHODES

ANY MOUNTING POSITION



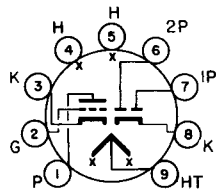
GLASS BULB

MINIATURE BUTTON

9 PIN BASE E9-1

OUTLINE DRAWING

JEDEC 6-2



BOTTOM VIEW

BASING DIAGRAM

JEDEC 9CF

THE 8447 IS A HIGH PERVEANCE DOUBLE DIODE AND HIGH MU TRIODE WITH SEPARATE CATHODES IN THE 9 PIN MINIATURE CONSTRUCTION FOR USE IN RELIABLE MOBILE RADIO COMMUNICATION EQUIPMENT. IT IS INTENDED TO REPLACE THE 12BR7 WHERE RELIABILITY IS THE PRIMARY CONSIDERATION. ITS HEATER IS DESIGNED TO OPERATE DIRECTLY FROM A 3 OR 6-CELL AUTOMOTIVE BATTERY.

DIRECT INTERELECTRODE CAPACITANCES

WITH SHIELD #315

CONNECTED TO CATHODE OF THE SECTION UNDER TEST

DIODE

EACH: P TO (K + H) 2.0 pf

TRIODE

GRID TO PLATE: G TO P 1.9 pf

INPUT: G TO (H + K) 2.8 pf

OUTPUT: P TO (H + K) 1.0 pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

SUPPLY CONNECTED TO PINS:	9 AND 4+5	4 AND 5	
AVERAGE VALUES - VOLTAGE	6.75	13.5	VOLTS
CURRENT	380	190	MA.
LIMITS OF APPLIED HEATER VOLTAGE	6.0 - 7.5	12.0 - 15.0	VOLTS
HEATER CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK	200		VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC	100		VOLTS
TOTAL DC AND PEAK	200		VOLTS

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MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

DIODE SECTION:

PEAK INVERSE VOLTAGE	300	VOLTS
PEAK CURRENT, EACH	60	MA.

TRIODE SECTION:

PLATE VOLTAGE	300	VOLTS
NEGATIVE GRID VOLTAGE	50	VOLTS
PLATE DISSIPATION	2.5	WATTS

AVERAGE CHARACTERISTICS

DIODE SECTION:

AVERAGE DIODE CURRENT WITH 5 VOLTS DC APPLIED (EACH SECTION)	17	MA.
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TRIODE SECTION:

PLATE VOLTAGE	250	VOLTS
CATHODE BIAS RESISTOR	200	OHMS
PLATE CURRENT	10	MA.
TRANSCONDUCTANCE	5,500	μ MHOS
AMPLIFICATION FACTOR	60	
PLATE RESISTANCE (APPROX.)	10,900	OHMS
GRID VOLTAGE (APPROX.) FOR $I_b = 10 \mu A$	-12	VOLTS