

TUNG-SOL

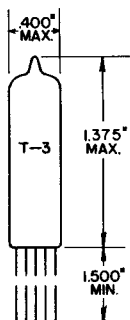
PENTODE

SUBMINIATURE

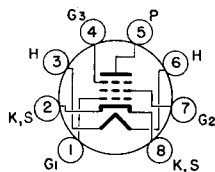
FOR

CLASS C OSCILLATOR
AND FREQUENCY MULTIPLIER
APPLICATIONS

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION



GLASS BULB
SUBMINIATURE BUTTON
8 PIN BASE E8-10
OUTLINE DRAWING
JEDEC 3-1



BOTTOM VIEW
BASING DIAGRAM
JEDEC 8DC

THE 8517 IS A PENTODE IN THE 8 PIN SUBMINIATURE CONSTRUCTION. IT IS INTENDED FOR CLASS C OSCILLATOR AND FREQUENCY MULTIPLIER APPLICATIONS WHERE LONG LIFE AND RESISTANCE TO SHOCK AND VIBRATION ARE ESSENTIAL.

DIRECT INTERELECTRODE CAPACITANCES

WITH SHIELD #318 TIED TO CATHODE

GRID 1 TO PLATE	MAX.	0.02	pf
GRID 1 TO ALL OTHER ELECTRODES		4.3	pf
PLATE TO ALL OTHER ELECTRODES		3.5	pf

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM SYSTEM - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	150	MA.
LIMITS OF APPLIED VOLTAGE		6.3 ± 0.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE			
TOTAL DC AND PEAK-EITHER POLARITY		200	VOLTS

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MAXIMUM RATINGS

ABSOLUTE MAXIMUM SYSTEM - SEE EIA STANDARD RS-239

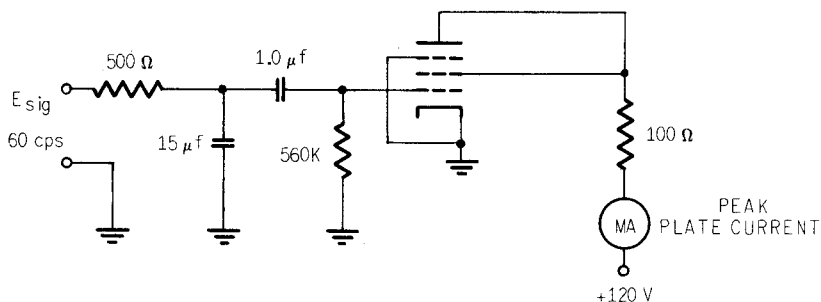
PLATE VOLTAGE	165	VOLTS
GRID 2 VOLTAGE	155	VOLTS
GRID 1 VOLTAGE	0	VOLTS
GRID 3 VOLTAGE	30	VOLTS
PLATE DISSIPATION	.80	WATTS
GRID 2 DISSIPATION	.55	WATTS
CATHODE CURRENT	16	MA.
GRID 1 CIRCUIT RESISTANCE	1.1	MEGOHMS
ENVELOPE TEMPERATURE	220	°C
ALTITUDE	60,000	FEET

AVERAGE CHARACTERISTICS

PLATE VOLTAGE	100	VOLTS
GRID 2 VOLTAGE	100	VOLTS
GRID 1 VOLTAGE	0	VOLTS
GRID 3 VOLTAGE	0	VOLTS
CATHODE RESISTOR	150	OHMS
PLATE CURRENT	6.1	MA.
GRID 2 CURRENT	4.2	MA.
GRID 1 VOLTAGE FOR $I_b = 100 \mu A$	-6.0	VOLTS
PEAK PLATE CURRENT-TRIODE CONNECTED-SEE DIAGRAM	48	MA.

CIRCUIT DIAGRAM

THIS CIRCUIT SIMULATES A CLASS C OSCILLATOR WITH HIGH-ORDER HARMONIC OUTPUT.

ADJUST E_{sig} FOR $E_{g1} = 21$ VOLTS RMS