

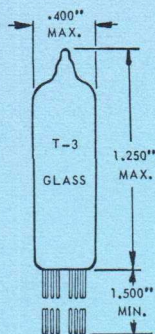
TUNG-SOL

PENTODE

SUBMINIATURE

OUTLINE DRAWING

JEDEC 3-11



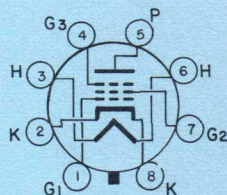
SUBMINIATURE BUTTON
8 FLEXIBLE LEADS
JEDEC E8-10

FOR
GUIDED MISSILE
SERVICE

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION

BASING DIAGRAM

JEDEC 8DC



BOTTOM VIEW

THE 6944 IS A SEMI-REMOTE CUTOFF RF PENTODE IN THE 8 PIN SUBMINIATURE CONSTRUCTION. IT IS DESIGNED SPECIFICALLY FOR GUIDED MISSILE SERVICE. THIS TYPE IS CHARACTERIZED BY STABLE PERFORMANCE IN OPERATION AT HIGH ALTITUDES AND WHERE SEVERE CONDITIONS OF MECHANICAL SHOCK, VIBRATION AND HIGH TEMPERATURE ARE ENCOUNTERED.

DIRECT INTERELECTRODE CAPACITANCES

WITH EXTERNAL SHIELD #318 CONNECTED TO CATHODE

GRID 1 TO PLATE	0.015	pf
INPUT	2.9	pf
OUTPUT	3.1	pf

HEATER CHARACTERISTICS AND RATINGS

AVERAGE CHARACTERISTICS	6.3 VOLTS	175	mA
LIMITS OF APPLIED VOLTAGE		5.5 TO 6.9	VOLTS
HEATER- CATHODE VOLTAGE			
HEATER POSITIVE WITH RESPECT TO CATHODE		200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		200	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

DC PLATE VOLTAGE	250	VOLTS
PEAK-PLATE FORWARD VOLTAGE	360	VOLTS
DC GRID 3 VOLTAGE		
POSITIVE VALUE	0	VOLTS
NEGATIVE VALUE	20	VOLTS
DC GRID 2 VOLTAGE	150	VOLTS
DC GRID 1 VOLTAGE		
POSITIVE VALUE	0	VOLTS
NEGATIVE VALUE	55	VOLTS
PLATE DISSIPATION	1.0	WATTS
GRID 2 DISSIPATION	0.36	WATTS
GRID 1 CIRCUIT RESISTANCE	1.0	MEGOHM
BULB TEMPERATURE	250	°C

CHARACTERISTICS

DC PLATE VOLTAGE	100	VOLTS
DC GRID 3 VOLTAGE	0	VOLTS
DC GRID 2 VOLTAGE	100	VOLTS
CATHODE RESISTOR	150	OHMS
DC PLATE CURRENT	7.0	mA
DC GRID 2 CURRENT	2.0	mA
TRANSCONDUCTANCE	3,200	μ MHOS
PLATE RESISTANCE	280,000	OHMS
DC GRID 1 VOLTAGE FOR $G_m = 25 \mu$ MHOS APPROX. (75 μ MHOS MAX.)	-12	VOLTS

SPECIAL TESTS AND RATINGS

IMPACT ACCELERATION		
FATIGUE		
FAILURE RATE		
ALTITUDE - ABSOLUTE MAXIMUM	80,000	FT.
RADIATION - ABSOLUTE MAXIMUM		
TOTAL DOSAGE - NEUTRONS/SQ. CM	10 ¹⁶	NVT
DOSE RATE - NEUTRONS/SQ. CM/SEC.	10 ¹²	NV

