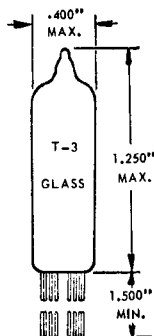


TUNG-SOL

TWIN TRIODE

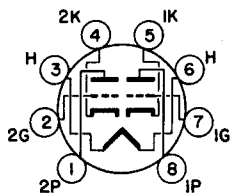
OUTLINE DRAWING
JEDEC 3-11

T-3
GLASS
SUBMINIATURE BUTTON
8 FLEXIBLE LEADS
JEDEC E8-10

SUBMINIATURE

FOR
GUIDED MISSILE
SERVICE

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION

BASING DIAGRAM
JEDEC 8DG

BOTTOM VIEW

THE 6948 IS A GENERAL PURPOSE HIGH- μ TWIN TRIODE 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

WITHOUT EXTERNAL SHIELD

GRID TO PLATE - EACH SECTION	0.75	pf
INPUT - EACH SECTION	1.6	pf
OUTPUT		
SECTION 1	0.20	pf
SECTION 2	0.25	pf
GRID TO GRID	MAX. 0.014	pf
PLATE TO PLATE	MAX. 0.86	pf

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	350	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 – EACH SECTION
ABSOLUTE MAXIMUM VALUES – SEE EIA STANDARD RS-239

DC PLATE VOLTAGE	250	VOLTS
PEAK-PLATE FORWARD VOLTAGE	360	VOLTS
DC GRID VOLTAGE:		
POSITIVE VALUE	0	VOLTS
NEGATIVE VALUE	55	VOLTS
PLATE DISSIPATION	0.5	WATTS
DC PLATE CURRENT	10	mA
GRID CIRCUIT RESISTANCE	1.0	MEGOHM
BULB TEMPERATURE	250	°C

CHARACTERISTICS – EACH SECTION

DC PLATE VOLTAGE	100	VOLTS
CATHODE RESISTOR	1,500	OHMS
DC PLATE CURRENT	0.8	mA
AMPLIFICATION FACTOR	70	
TRANSCONDUCTANCE	1,650	μMHOS
DC GRID VOLTAGE FOR $I_b = 50 \mu A$ DC MAXIMUM	- 3.5	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