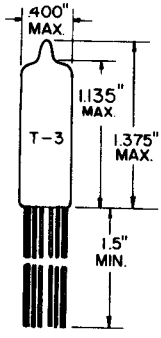
TUNG-SOL

PENTODE

SUBMINIATURE TYPE

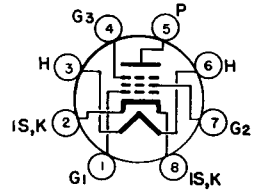


GLASS BULB
SUBMINIATURE BUTTON
FLEXIBLE LEADS
BASE E8-10
OUTLINE DRAWING
JEDEC 3-1

COATED UNIPOTENTIAL CATHODE

FOR MOBILE AND AIRCRAFT
EQUIPMENT APPLICATIONS

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 8DC

THE 6206 IS A SEMI-REMOTE CUTOFF RF PENTODE IN THE 8 PIN SUBMINIATURE CONSTRUCTION. IT IS DESIGNED FOR OPERATION IN THE UHF REGION UNDER CONDITIONS OF SEVERE SHOCK, VIBRATION, HIGH TEMPERATURE AND HIGH ALTITUDE.

DIRECT INTERELECTRODE CAPACITANCES

	WITHOUT SHIELD	WITH SHIELD [B]	
GRID #1 TO PLATE, MAX.	0.03	0.015	pf
INPUT	4.0	4.2	pf
OUTPUT	1.9	3.4	pf

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE VALUES

AVERAGE CHARACTERISTICS	6.3 VOLTS	150	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION		6.3±0.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE		±200	VOLTS

RATINGS

MECHANICAL

MAXIMUM IMPACT ACCELERATION[C]	450	G
MAXIMUM UNIFORM ACCELERATION[D]	1 000	G
MAXIMUM VIBRATIONAL ACCELERATION FOR EXTENDED PERIODS[E]	2.5	G
MAXIMUM BULB TEMPERATURE	250	°C

CONTINUED ON FOLLOWING PAGE

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

ABSOLUTE VALUES

PLATE VOLTAGE, DC	165	VOLTS
GRID #2 VOLTAGE, DC	155	VOLTS
PLATE DISSIPATION	1.1	WATTS
GRID #2 DISSIPATION	0.55	WATTS
CATHODE CURRENT	16.5	MA.
NEGATIVE GRID #1 VOLTAGE	55	VOLTS

TYPICAL OPERATING CHARACTERISTICS

CONDITIONS:		
HEATER VOLTAGE	6.3	VOLTS
PLATE VOLTAGE, DC	100	VOLTS
GRID #3 VOLTAGE[F]	0	VOLTS
GRID #2 VOLTAGE, DC	100	VOLTS
CATHODE BIAS RESISTOR	120	OHMS
PLATE CURRENT	7.2	MA.
GRID #2 CURRENT	2.2	MA.
TRANSCONDUCTANCE	4 500	μMHOS
PLATE RESISTANCE	260 000	OHMS
GRID VOLTAGE FOR 25 μMHOS TRANSCONDUCTANCE	-14	VOLTS
NOISE OUTPUT VOLTAGE[G] MAXIMUM	60	MV.
LIFE EXPECTANCY:		
30° C AMBIENT TEMPERATURE	5 000	HOURS
175°C AMBIENT TEMPERATURE	1 000	HOURS

[B] WITH EXTERNAL SHIELD OF 0.405 INCH DIAMETER CONNECTED TO CATHODE.

[C] FORCES IN ANY DIRECTION AS APPLIED BY THE NAVY TYPE HIGH IMPACT (FLYWEIGHT) SHOCK MACHINE FOR ELECTRIC DEVICES OR EQUIVALENT.

[D] FORCES IN ANY DIRECTION APPLIED GRADUALLY, AS IN CENTRIFUGE.

[E] VIBRATIONAL FORCES IN ANY DIRECTION AT 60 CYCLES PER SECOND FOR A PERIOD EXCEEDING 100 HOURS.

[F] GRID #3 CONNECTED TO CATHODE AT SOCKET.

[G] ACROSS PLATE RESISTOR OF 10,000 OHMS, WITH APPLIED VIBRATIONAL ACCELERATION OF 15G AT 40 CYCLES PER SECOND.