TRIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE
HEATER
2.8 VOLTS 0.45A AMP.
ANY MOUNTING POSITION

THE 3F05A IS A SEMI-REMOTE CUTOFF TRIODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A VHF AND RF AMPLIFIER AT A B+ OF 135 VOLTS. EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 3F05A IS IDENTICAL TO THE 2F05A AND THE 6F05A.

DIRECT INTERELECTRODE CAPACITANCES
WITH EXTERNAL SHIELD

GRID TO PLATE
INPUT: G TO (H+K+I.S.+E.S.)
OUTPUT: P TO (H+K+I.S.+E.S.)
HEATER TO CATHODE

0.52 pf
5.0 pf
3.5 pf
2.5 pf

RATINGS
INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM C

HEATER VOLTAGE D
MAXIMUM PLATE VOLTAGE
MAXIMUM PLATE DISSIPATION
MAXIMUM DC CATHODE CURRENT
MAXIMUM NEGATIVE GRID VOLTAGE
MAXIMUM GRID CIRCUIT RESISTANCE (SELF BIAS)
MAXIMUM HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK
HEATER POSITIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK
HEATER WARM-UP TIME (APPROX.)*

2.8 VOLTS
200 VOLTS
2.5 WATTS
22 MA.
50 VOLTS
1.0 MEGOHMS
100 VOLTS
100 VOLTS
11.0 SECONDS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
CLASS A1 AMPLIFIER

HEATER VOLTAGE D
HEATER CURRENT D
PLATE VOLTAGE
GRID VOLTAGE
PLATE CURRENT
TRANSCONDUCTANCE
AMPLIFICATION FACTOR
PLATE RESISTANCE (APPROX.)
EC FOR IB = 100 MA (APPROX.)

2.8 VOLTS
0.45±0.03 AMP.
135 VOLTS
1.2 VOLTS
8.9 MA.
12000 µMHO
74
6300 OHMS
-4.5 VOLTS

CONTINUED ON FOLLOWING PAGE
CONTINUED FROM PRECEDING PAGE

NOTES

B. For series/parallel operation of heaters, equipment should be designed that at normal supply voltage, bohey tubes will operate at this value of heater/current voltage.

C. Design-maximum ratings are limiting values of operating and environmental conditions applicable to a bohey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions. The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics. The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bohey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.

D. Heater voltage supply variations shall be restricted to maintain heater voltage/current within the specified tolerance.

*Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated voltage after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance of value 3 times the nominal heater operating resistance.