PENTODE

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 1.2 AMP.
AC OR DC
ANY MOUNTING POSITION

BOTTOM VIEW
INTERMEDIATE SHELL
OR
SHORT INTERMEDIATE SHELL
7 PIN OCTAL
6AM

GLASS BULB
SKIRTED MINIATURE CAP

THE 6BQ6GTB IS A BEAM POWER AMPLIFIER DESIGNED FOR USE AS A HORIZONTAL DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES — APPROX.

| GRID TO PLATE | 0.6 | μμf |
| INPUT         | 15  | μμf |
| OUTPUT        | 7   | μμf |

RATINGS
(INTERPRETED ACCORDING TO DESIGN CENTER VALUES UNLESS OTHERWISE SPECIFIED)

HORIZONTAL DEFLECTION AMPLIFIER

HEATER VOLTAGE
6.3 VOLTS

MAXIMUM HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK
200 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE
DC
100 VOLTS
TOTAL DC AND PEAK
200 VOLTS

MAXIMUM DC PLATE SUPPLY VOLTAGE
BOOST + DC POWER SUPPLY
600 VOLTS

MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABSOLUTE MAX.)
6000 VOLTS

MAXIMUM PEAK NEGATIVE PLATE VOLTAGE
1250 VOLTS

MAXIMUM PLATE DISSIPATION
11 WATTS

MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE
300 VOLTS

MAXIMUM DC GRID #2 VOLTAGE
200 VOLTS

MAXIMUM GRID #2 DISSIPATION
2.5 WATTS

MAXIMUM AVERAGE CATHODE CURRENT
110 MA.

MAXIMUM PEAK CATHODE CURRENT
400 MA.

MAXIMUM GRID #1 CIRCUIT RESISTANCE
0.47 MEGOHM

MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)
220 °C

A FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS: FEDERAL COMMUNICATIONS COMMISSION". THE DUTY CYCLE OF THE VOLTAGE PULSE NOT TO EXCEED 15% OF A SCANNING CYCLE.

B IN STAGES OPERATING WITH GRID LEAK BIAS, AN ADEQUATE CATHODE BIAS RESISTOR OR OTHER SUITABLE MEANS IS REQUIRED TO PROTECT THE TUBE IN THE ABSENCE OF EXCITATION.

CONTINUED ON FOLLOWING PAGE
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE 6.3 VOLTS
HEATER CURRENT 1.2 AMP.
PENTODE OPERATION:
PLATE CURRENT 57 MA.
GRID #2 CURRENT 2.1 MA.
TRANSCONDUCTANCE 5900 MMHOS
PLATE RESISTANCE 14500 OHMS
ZERO BIAS:
PLATE CURRENT 260 MA.
GRID #2 CURRENT 26 MA.
CUTOFF:
GRID #1 VOLTAGE (APPROX.) -43 VOLTS
TRIODE AMPLIFICATION FACTOR 4.3

SIMILAR TYPE REFERENCE: Except for heater characteristics, the 6BQ6GTB is identical to the 17BQ6GTB.

THE ELECTRICAL DATA AND PIN CONNECTION FOR TYPE 6BQ6GTB ARE IDENTICAL WITH THOSE OF TYPES 6BQ6GA AND 6CQ6.

C WITH E6 = 250V, E62 = 150V, AND E61 = -22.5V.
D WITH E6 = 60V. AND E62 = 150V. (INSTANTANEOUS VALUES)
E FOR I6 = 1 MA. WITH E6 = 250V. AND E62 = 150V.
F WITH E6 = E62 = 150V. AND E61 = -22.5V.
6BQ6GTB

$E_f = 6.3$ Volts
$E_{C2} = 100$ Volts

- Plate current ($I_b$) vs. plate volts for $E_{C1} = 0$

6BQ6GTB

$E_f = 6.3$ Volts
$E_{C2} = 150$ Volts

- Plate current ($I_b$) vs. plate volts for $E_{C1} = 0$