TYPE 6052
DOUBLE DIODE

The Type 6052 is a subminiature double diode capable of operation in the uhf region. This type is characterized by long life and stable performance. It is designed for service where severe conditions of mechanical shock and vibration are encountered.

MECHANICAL DATA

GENERAL

Style ................................................. subminiature
Cathode .............................................. coated, unipotential
Bulb ................................................ T-3
Base ................................................. KS-1,(1) Subminiature Button--Flexible Leads
Outline .............................................. 3-1
Maximum Bulb Diameter ............................ 0.400 inch
Maximum Overall Bulb Length .................... 1.375 inches
Minimum Lead Length .............................. 1.500 inches
Mounting Position ................................. any
Basing .............................................. SDJ-0-4

Lead Connections:
Lead 1 .. #2 diode plate  Lead 5 .. #1 diode plate
Lead 2 .. #2 diode cathode  Lead 6 .. heater
Lead 3 .. heater  Lead 7 .. #1 diode cathode
Lead 4 .. internal shield  Lead 8 .. no connection

RATINGS(2)

Maximum Impact Acceleration(3) .................. 450 g
Maximum Uniform Acceleration(4) ................ 1,000 g
Maximum Vibrational Acceleration for
Extended Periods(5) ............................. 2.5 g

ELECTRICAL DATA

GENERAL

Direct Interelectrode Capacitances:(6)
Plate to Plate, maximum .......................... 0.026 μF
Input (each section): Plate to Cathode, Heater,
Internal Shield and External Shield .......... 3.4 μF
Cathode to Heater, Plate, Internal
Shield, and External Shield (each section) ... 4.0 μF

Resonant Frequency, minimum ................. 900 megacycles

Heater Voltage (ac or dc) ....................... 6.3 volts
Heater Current .................................. 300 milliamperes

RATINGS(2) -- Absolute System

Heater Voltage (ac or dc)(7) ..................... 6.3 (±5%) volts
Maximum Inverse Peak Plate Voltage .......... 460 volts
Maximum Peak Plate Current (each plate) ...... 60 milliamperes
Maximum Output Current (dc) (each plate) ....... 10 milliamperes
Maximum Heater-Cathode Voltage .............. ±360 volts

(See Page 2 for notes.)
TYPE 6052

CHARACTERISTICS

Tube Voltage Drop for 50 milliamps Plate Current, each plate (dc) ........................................... 10 volts

Life Expectancy, at 160 °C Maximum Bulb Temperature ....................................................... 5,000 hours

TYPICAL OPERATION -- Full-Wave Rectifier

Heater Voltage (ac or dc) ................................................................. 6.3 volts
Plate Voltage, each plate (ac, rms) ........................................ 150 volts
Effective Plate Supply Impedance, minimum ......................... 300 ohms
Output Current (dc) ................................................................. 18 milliamps

(1) With 1.500 inches Minimum Lead Length as specified above.

(2) Limitations beyond which normal tube performance and tube life may be impaired.

(3) Forces in any direction as applied by the Navy Type High Impact (Flyweight) Shock Machine for Electronic Devices, or equivalent.

(4) Forces in any direction applied gradually, as in centrifuge.

(5) Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours.

(6) With external shield of 0.405 inch diameter.

(7) Tube life and reliability of performance are directly related to the degree of regulation of the heater voltage to its center-rated value of 6.3 volts.