MECHANICAL DATA

Dimensions
Mounting Position
Number of Ignitors
Ambient Temperature Range
(non-operating)

Per Outline
Any
One
-40 to + 100°C

ELECTRICAL DATA

RATINGS

Transmitter Peak Power (min.)
Ignitor Open Circuit Supply Voltage

4 kW
-650 Vdc

GENERAL DATA

Operational Band (1)
Spike Leakage Energy (max.) (2)
Flat Leakage Power (max.)
Insertion Loss at 9000 mc and Zero
  ignitor current (max.)
Ignitor Interaction at 9000 mc and 100
  μAdc ignitor current (max.)
Ignitor Voltage Drop at 100 μAdc
  ignitor current
Recovery Time (max.) (3)
Arc Power Loss (max.) (4)
Life (min.)

8500 to 9600 mc
0.15 ergs
30 mW
0.7 db
0.3 db
-200 to -375 Vdc
10 μsec.
0.8 db
500 hours

APPLICATION DATA

The Sylvania Type 6164 is designed for use in amplitude sensitive monopulse systems employing RG S1/U waveguide in the RF section. The use of this tube eliminates extraneous amplitude and phase effects in the determination of target position.

NOTES

(1) The 6164 is tuned so that no tube will differ from any other tube in vector reflection coefficient and phase of transmission by more than 4 db SWR and 10 degrees respectively.
(2) Tested at F=9000 Mc; Po=40Kw; tp=1.0±.15 μsec. and 0.5±.15 μsec.; prr=1000 pps; Ii=100 μAadc.
(3) Tested at F=9000 Mc; Po=200Kw; tp=1.0±.15 μsec.; prr=1000 pps;
  Ii=100 μAadc. The loss of signal in the tube at the specified time after the
  transmitter pulse shall not be greater than 3.0 db in excess of the loss
  at 800 to 1000 μsec. after the pulse.
(4) Tested at Po=4KW and duty cycle of .001

Note: Exhaust tubulation not to extend beyond flange more than 1/4".

from JETEC release #1390, Dec. 27, 1954