FEATURES

- Trigger Voltage up to 40kV
- Fast rise time – pulses up to 30kV/µs
- DC isolation 35kV
- Flame retardant – resin rated to UL94 V-0
- Polarity identification – positive or negative pulses can be obtained by appropriate connection

DESCRIPTION

The JR200 is a trigger transformer designed for triggering spark gaps.
ELECTRICAL AND PHYSICAL CHARACTERISTICS (at 20 8C)

All ratings given are absolute and non-simultaneous. It is the equipment designer’s responsibility to ensure that they are not exceeded. Typical values given are for e2v technologies’ triggered spark gaps.

Typical Max
Input voltage (peak) (see notes 1 and 2) . . . . . . . – 550 V
Input energy (see note 2) . . . . . . 70 150 mJ
Secondary open circuit voltage (peak) (see note 3) . . . . . . . – 40 kV
Rate of rise of output voltage (see notes 4 and 5) . . . . . . 25 530 kV/ms
Pulse repetition rate . . . . . . 5 100 pps
Output current (peak) (see note 3) . . 1.0 – A
Voltage transformation ratio . . . . . 62:1 min

ENVIRONMENTAL PARAMETERS

Storage temperature . . . . . . 740 to +100 8C
Operating temperature . . . . . 732 to +100 8C
Mechanical shock (half-sine) . . . . . . 981 m/s2
Vibration (20 to 500 Hz) . . . . . . . . 96.6 m/s2
Net weight . . . . . . . . . . . . . . 300g approx

NOTES

(All notes apply to maximum ratings unless stated)
1. Measured at the primary leads.
2. Input energy is drawn from a 1 µF capacitor (0.47 µF capacitor typically).
3. A 10 kΩ wire wound 3 W (minimum) series resistor must be included in the output circuit to protect the secondary winding against excessively high voltage spikes.
4. Measured at a maximum repetition rate of 100 pps on the unloaded output pulse with a 400 V primary input voltage measured at the primary leads (typically 300 V input voltage, 15 kV/ms rate of rise).
5. Average value measured between 25% and 75% of peak voltage.

OUTLINE (All dimensions in millimetres)

Outline drawings of the item should be present in the data sheet and any writing should be legible when printed.

OUTLINE NOTES

A positive pulse on the primary lead, identified by the polarity sleeving band, results in a positive pulse on the secondary lead, identified by the polarity sleeving band.