

FEATURES

- Trigger Voltage up to 40kV
- Fast rise time – pulses up to 30kV/ μ s
- 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.

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A1A-JR200 Version 9, Nov 2023

ELECTRICAL AND PHYSICAL CHARACTERISTICS (at 20°C)

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	<30 kV/μs
Pulse repetition rate	5	100 pps
Output current (peak) (see note 3)	1.0	– A
Voltage transformation ratio ...	62:1 min	

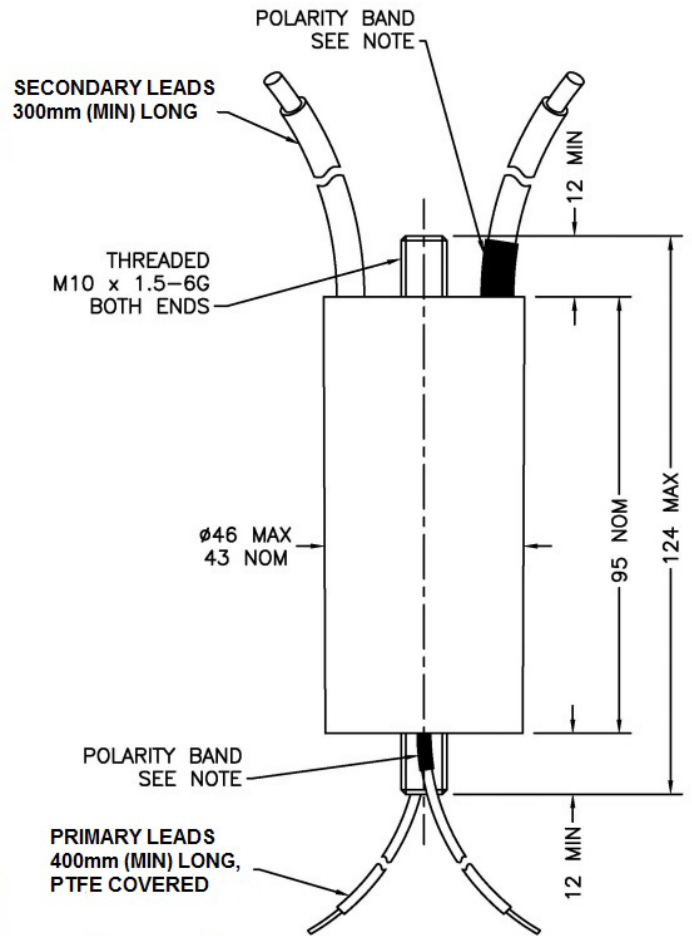
ENVIRONMENTAL PARAMETERS

Storage temperature.....	-40°C to +100 °C
Operating temperature.....	-32°C to +100 °C
Mechanical shock (half-sine)..	981 m/s ²
Vibration (20 to 500 Hz).....	96.6 m/s ²
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/μs rate of rise).
 5. Average value measured between 25% and 75% of peak voltage.

OUTLINE (All dimensions in millimetres)



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.