

### DESCRIPTION

The MA785A is a compact trigger transformer designed for triggering spark gaps.

### FEATURES

- Trigger voltage up to 40 kV
- Fast rise time - pulses up to 30 kV/ $\mu$ s
- Flame retardant - approved to UL94 V-2
- Polarity identification - positive or negative pulses can be obtained by appropriate connection

### 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)	150	200	V
Input energy (see note 2)	6	20	mJ
Secondary open circuit voltage (peak) (see notes 3 and 4)	25	35	kV
Rate of rise of output voltage (see notes 5 and 6)	25	<30	kV/ $\mu$ s
Pulse repetition rate	5	100	pps
Output current (peak) (see note 3)	1.0	-	A
Voltage transformation ratio	150:1 min		

### ENVIRONMENTAL PARAMETERS

Storage temperature	-40 to +70	°C
Operating temperature	-32 to +70	°C
Mechanical shock, half-sine	981	m/s <sup>2</sup>
Vibration (20 to 500 Hz)	96.6	m/s <sup>2</sup>
Net weight	80 g approx	

### NOTES

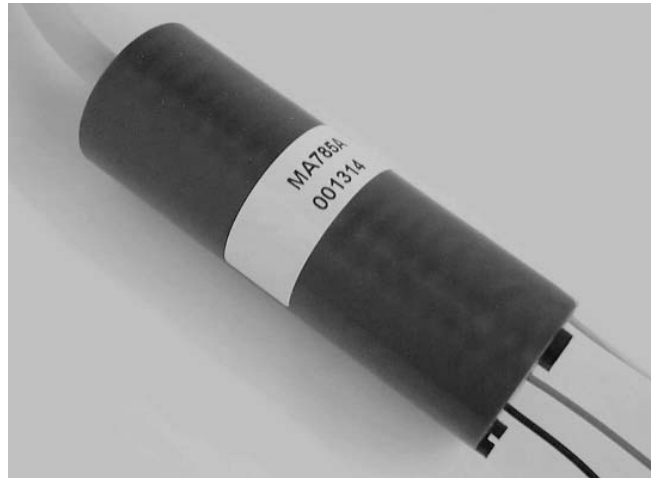
(All notes apply to maximum ratings unless stated)

1. Measured at the primary leads.
2. Input energy is drawn from a 1  $\mu$ F capacitor (0.47  $\mu$ F capacitor typically).
3. A 10 k $\Omega$  wirewound 3 W (minimum) series resistor must be included in the output circuit to protect the secondary winding against excessive high voltage spikes.
4. HT is at the end remote from earthed surfaces.
5. Measured at a maximum repetition rate of 100 pps on the unloaded output pulse with a 200 V primary input voltage measured at the primary leads.
6. Average value measured between 25% and 75% of peak voltage.

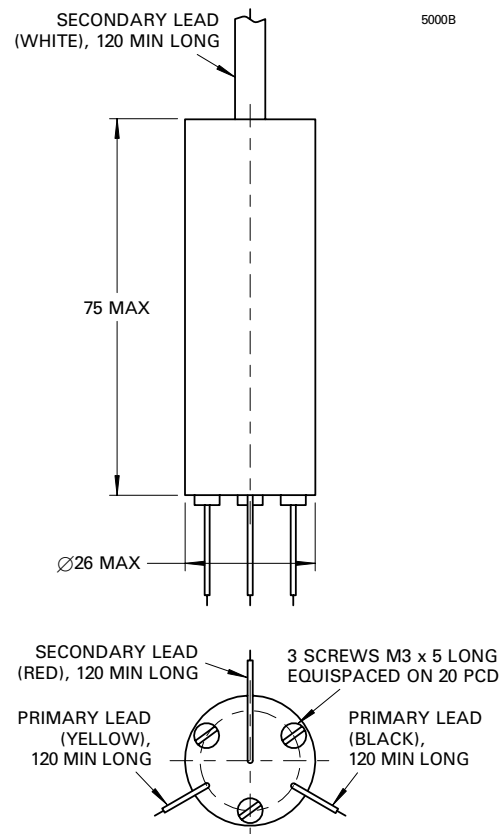
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### OUTLINE (All dimensions in millimetres)



### Outline Note

A positive pulse on the yellow primary lead results in a positive HT pulse at the white secondary lead, and a positive pulse at the black primary lead results in a negative HT pulse at the white secondary lead.