

The data should be read in conjunction with the 3-electrode Spark Gap Preamble.

### DESCRIPTION

The GX3500 Series of triggered 3-electrode spark gaps are gas discharge tubes, hermetically sealed in a ceramic/metal envelope for use in air. Tubes with a DC hold-off voltage in the standard range 15 to 50 kV are available. This is signified by numerals following the type number, expressed in hundreds of volts, e.g. GX3500-400 has a 40 kV DC hold-off voltage capability.

### TYPICAL APPLICATIONS

- Crowbar circuits for high power travelling wave tubes, power klystrons and similar devices
- High voltage switches for laser firing
- General switching applications

### ELECTRICAL AND PHYSICAL CHARACTERISTICS

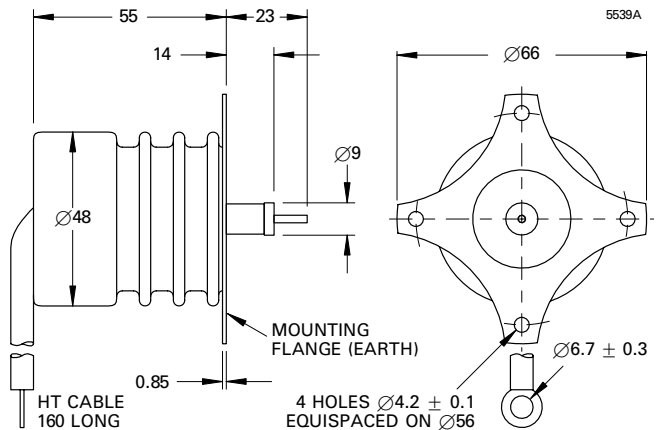
All ratings given in this data sheet are absolute, non-simultaneous ratings. It is the equipment designer's responsibility to ensure that they are not exceeded. The spark gap life depends on circuit conditions such as peak discharge current and duration, charge transfer per discharge and the repetition rate.

DC hold-off voltage range	15 kV to 50 kV
Hold-off voltage tolerance	0 to +10%
Operating voltage range	40 to 80% of hold-off
Trigger requirements	50% of hold-off (15 kV min) at $\geq 15 \text{ kV}/\mu\text{s}$ (open circuit peak amplitude), trigger current $> 1.0 \text{ A}$
Repetition rate	50 pps max
Peak current, single discharge	120 kA max
Charge transfer, single discharge	0.5 C max
Cumulative charge transfer at 25 mC per discharge, 4 Hz, 3.8 kA peak current under-damped	25 000 C
Anode delay time	$< 15 \mu\text{s}$ (see note)
Capacitance, end to end	2 pF typical
Operating temperature	$-40$ to $+75 \text{ }^\circ\text{C}$
Mechanical shock, half-sine	40 g for 6 ms
Mounting position	any
Net weight	200 g approx

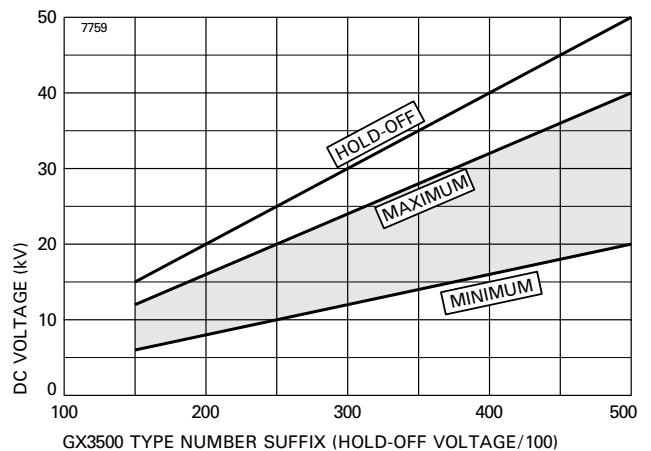
**Note** Typical value measured from 90% of trigger breakdown to anode peak current, at 60 to 80% of hold-off voltage.



### OUTLINE (Maximum dimensions in millimetres)



### OPERATING VOLTAGE RANGE



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