

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

### DESCRIPTION

The GXTC Series of triggered 3-electrode spark gaps are gas discharge tubes, hermetically sealed in a ceramic/metal envelope. Tubes with a DC hold-off voltage in the range 10 to 30 kV are available. This is signified by numerals following the type letters, expressed in hundreds of volts, i.e. the range of available types is from GXTC100B/GXTC100BR (10 kV) to GXTC300B/GXTC300BR (30 kV). The 'R' suffix is primarily for medical lithotripsy devices.

### TYPICAL APPLICATIONS

- Medical lithotripsy
- Crowbar circuits
- High di/dt switching
- High voltage switches for laser firing
- High energy switches
- 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 (see note 1)	10 to 30 kV
Hold-off voltage tolerance	0 to +10%
Operating voltage range	40 to 80% of hold-off
Trigger requirements	50% of hold-off (5 kV min) at $\geq 15 \text{ kV}/\mu\text{s}$ (open circuit peak amplitude), trigger current $> 1.0 \text{ A}$
Repetition rate	100 pps max
Peak current, single discharge	100 kA max
Charge transfer, single discharge	0.5 C max
Capacitive stored charge transfer (230 $\mu\text{C}$ ); total transferred	1 mC max
Cumulative charge transfer at 1 mC per discharge, 6 Hz, 3 kA peak current (oscillating)	1000 C typ
Anode delay time	$< 15 \mu\text{s}$ (see note 2)
Operating temperature	-20 to +90 °C
Mechanical shock, half-sine	40 g for 6 ms
Mounting position (see Preamble)	any
Net weight	250 g approx

### NOTES

1. Other voltage variants are available.
2. Typical value measured from 90% of trigger breakdown to anode peak current, at 60 to 80% of hold-off voltage.

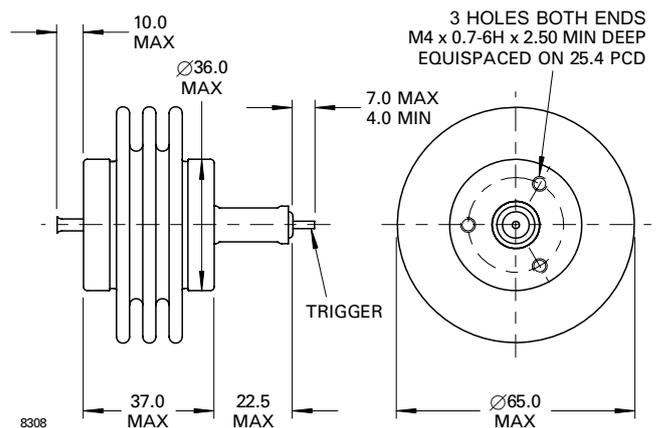
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### OUTLINE (All dimensions in millimetres)



### OPERATING VOLTAGE RANGE

