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 ≥15 kV/μs (open circuit peak amplitude), trigger current >1.0 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 μC); 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 μs (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.