

## Glossary

### ■ DC Spark-over Voltage

It is the static behavior of GDT. DC spark-over voltage is measured with 100V/s low voltage rate which ignites the GDT.

### ■ Max. Impulse Breakdown Voltage

It is the dynamic behavior of GDT. Impulse breakdown voltage is measured with  $dv/dt=100V/\mu s$  and  $1KV/\mu s$  voltage rate which ignites the GDT.

### ■ Max. Impulse Discharge Current

The maximum peak current defined at  $8/20\mu s$  current pulse which is allowed to be applied at least ten times without causing DC spark-over voltage change more than a specific rate.

### ■ Impulse Life

The minimum number of  $10/1000\mu s$  (or  $8/20\mu s$ ) current waveform impulse which is allowed to be applied without causing DC spark-over voltage change more than a specific rate.

### ■ Nominal Alternating Discharge Current

The rated rms value of AC current flows through the GDT which tests at 50Hz, 1sec.

### ■ DC Holdover Voltage

This value is defined as the maximum DC voltage across the terminals of GDT which is expected to return its high impedance state after the GDT breakdown.

### ■ Insulation Resistance

Insulation resistance value is measured on the GDT's terminals under the specified DC voltage.

### ■ Capacitance

The capacitance of the GDT is measured at 1MHz.

### ■ Breakdown Time

When transient over-voltage occurs, the time for GDT to change from its high resistance state (insulation state) to its low resistance states is called breakdown time. For AC power line protection, breakdown time of GDT is usually within a short period of time (less than 100ns).