# **HIGH ENERGY DEVICES**

# TG Three-Electrode Legacy Series Triggered Spark Gaps



#### Features

- Tight main static breakdown voltage tolerance (± 10%)
- Long-life tungsten or molybdenum electrodes
- Rugged ceramic-to-metal or glass-to-metal construction

#### Description

High Energy Devices' TG Legacy Series of three electrode triggered sparkgaps (cold cathode thyratrons) are designed for switching high levels of stored energy in fractions of a microsecond, on command, using low energy control pulses.

#### **Applications**

- Test equipment
- Video displays
- Pulse generators
- Medical electronics

#### Voltage Range

Series	Main Static Breakdown Voltage	Units
TG		
Three	1.0-30.0	kV
Electrode		

Devices in the TG Three-Electrode Legacy Series with other main static breakdown voltages other than the standard voltages listed (in the 1.0-30kV range) are available upon request. Also refer to the TA/TB/TG221-226 Series Triggered Spark Gaps for additional product availability.

#### **Ordering Information**

A complete part number is represented by the information contained in the Part Number column of the specification table.

## Specifications (@25°C)

Part Number	Applied DC Voltage Range	Main Static Breakdown (kV ± 10%)	Peak Current (kA) <sup>(1)</sup>	Delay Time (µs) <sup>(2)</sup>	Package Outline	Dimension A (Inches)	(Inches)	Dimension C (Inches)
TG7	1.3 - 4.0	5.0	15.0	0.1	I-A	2.427 nom	0.228 max	1.500 max
TG88	1.3 - 4.0	5.0	15.0	0.1	I-B	2.427 nom	0.228 max	2.015 max
TG114	2.5 - 8.0	10.0	15.0	0.1	I-B	2.427 nom	0.228 max	2.015 max
TG121	0.8 - 2.0	2.5	15.0	0.3	I-B/I-D	1.990 nom	0.228 max	1.450 max
TG122	1.5 - 4.0	5.0	15.0	0.1	I-B/I-D	1.990 nom	0.228 max	1.450 max
TG123	2.3 - 6.0	7.5	15.0	0.1	I-B/I-D	1.990 nom	0.228 max	1.450 max
TG124	3.0 - 8.0	10.0	15.0	0.1	I-B/I-D	1.990 nom	0.228 max	1.450 max
TG125	4.5 - 12.0	15.0	20.0	0.1	I-B/I-D	2.670	.540	1.560
TG126	6.0 - 16.0	20.0	20.0	0.1	I-B/I-D	2.670	.540	1.560
TG127	7.5 - 20.0	25.0	20.0	0.1	I-B/I-D	2.797 nom	0.540 max	2.051 max
TG151	2.7 - 6.0	6.8	15.0	0.1	special	-	-	-
TG177	0.6 - 1.9	2.5	10.0	0.3		1.625 max	0.520 ± .030	0.300 ± .025
TG178	1.5 - 3.5	5.0	10.0	0.2		1.625 max	0.580 ± .030	0.340 ± .025
TG179	3.0 - 8.0	10.0	10.0	0.1		1.719 max	0.620 ± .030	0.380 ± .025
TG180	4.5 - 12.0	15.0	10.0	0.1		1.906 max	0.725 ± .030	0.490 ± .025
TG181	5.3 - 14.0	17.5	10.0	0.1		1.906 max	0.725 ± .030	0.490 ± .025
TG240	0.4 - 0.85	1.0	10.0	0.1	II	0.750 ± .063	-	-
TG241	0.5 - 1.25	1.5	10.0	0.1	II	0.750 ± .063	-	-
TG242	0.7 - 1.7	2.0	10.0	0.1	II	0.760 ± .063	-	-
TG243	0.8 - 2.1	2.5	10.0	0.1	II	0.760 ± .063	-	-
TG244	1.2 - 4.2	5.0	10.0	0.1	II	0.760 ± .063	-	-
TG245	2.0 - 6.2	7.5	10.0	0.1	II	0.760 ± .063	-	-
TG246	3.5 - 8.5	10.0	10.0	0.15		0.790 ± .063	-	-
TG247	4.5 - 11.0	12.0	10.0	0.15	II	0.790 ± .063	-	-
TG248	7.0 - 12.0	15.0	10.0	0.15	II	0.830 ± .063	-	-
TG1208	8.3 - 22.2	25.0 - 30.0	20.0	0.1	I-B	2.797 nom	0.515 ± .020	2.051 max

<sup>(1)</sup> The peak current is a conservative maximum for an approximately triangular pulse with a 50µs half-width.

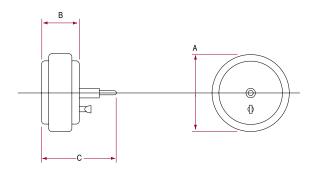
<sup>(2)</sup> Delay time is for Mode A operation when the applied voltage is 80% of the main static breakdown and the trigger pulse reaches 150% of the maximum trigger voltage.

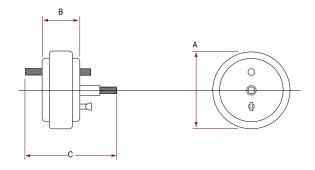
### MECHANICAL DIMENSIONS mm/(inches)

**TG Legacy I-A** 

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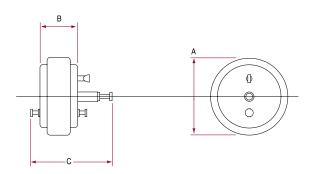
TG Legacy I-B

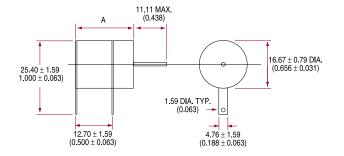




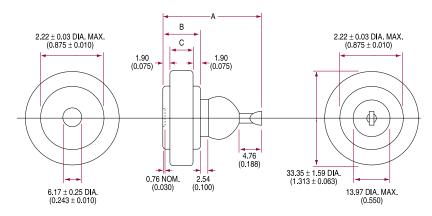
# TG Legacy I-D

**TG Legacy II** 





# **TG Legacy III**



# **Contact Information:**

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