TRIGATRÓN – spínané iskrište

Triggered spark gap





CV6008, CV6173

Gas-filled triggered spark gap. For in-line discharge modulators. Gap voltage: 7.2 kV Trigger voltage: 3.2 kV PRF: 1200 /s Peak power output: 160 kW

EEV datasheet 1971.

See also: <u>Mike's electric stuff / spark gaps</u> .

Photo left © Andy Cowley, M1EBV, 2005.





Left: Bottom View.

The bulb contains a considerable quantity of loose powder. This is possibly a radioactive material included to promote fast triggering.



FIG. 1. Schematic drawing of a typical trigatron spark gap.



FIG. 3. Sequence of shutter photos showing the time development of cathode-directed streamers in the main gap. The streamers are pictured at various times after initiation. Due to the increasing intensity of the channels, the image intensifier gain was lower for (c) and (d). Conditions were: positive trigger, negative main gap (+ -) polarity, $V_i = 10$ kV, $V_g = -60$ kV, N₂ at 700 Torr, 2.5-cm gap separation, and 4.76-mm-diam trigger pin flush with the main electrode.



FIG. 5. Synchronized streak picture and main gap current trace, obtained under the same conditions as Fig. 3. Synchronization is accurate to within ± 1 ns.