The CK6438/CK1039 is a cold cathode, corona-discharge tube of subminiature construction, designed for use as a voltage regulator in high voltage low current supplies. It has an operating current range of 5 to 125 µA over which it maintains a substantially constant operating voltage of 1200 volts. Two cathode leads are provided which may be used to disconnect the load when the tube is removed from the socket. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

**MECHANICAL DATA**

**ENVELOPE:** T-3 Glass  
**BASE:** None (0.016" tinned flexible leads. Length: 1.5" min.)  
**Spacing:** 0.096" center-to-center  
**TERMINAL CONNECTIONS:**  
Lead 1 Cathode  
Lead 3 Anode  
Lead 5 Cathode  
**MOUNTING POSITION:** Any

**ELECTRICAL DATA**

**RATINGS - ABSOLUTE MAXIMUM VALUES:**

- DC Anode Supply Voltage: 2000 volts  
- Minimum DC Anode Supply Voltage: 1400 volts  
- DC Operating Current (continuous): 5 to 125 µA  
- Ambient Temperature Range: -55 to +70 °C

**CHARACTERISTICS AND TYPICAL OPERATION:**

- DC Starting Voltage (approx.): 1400 volts max.  
- DC Operating Voltage (approx.) at 25 µA: 1200 volts  
- Regulation (5 to 100 µA): 20 volts  
- Leakage Current at 500 volts: 0.5 µA max.

▲ Not less than indicated supply voltage should be provided to insure "starting" throughout tube life.

Tentative Data