

Ceramic Capacitor Stacks for Voltage Multiplier Circuits

PRODUCT DESCRIPTION

Ceramic capacitor stacks are used mainly in modern high voltage supplies e.g. in X-ray machines for medical applications, industrial radiography (flaw detection, baggage examination, etc.) or in electrostatic powder coating equipment.

A high frequency generator (about 20 kHz) supplies the input AC voltage via a ferrite transformer to the multiplier circuit.

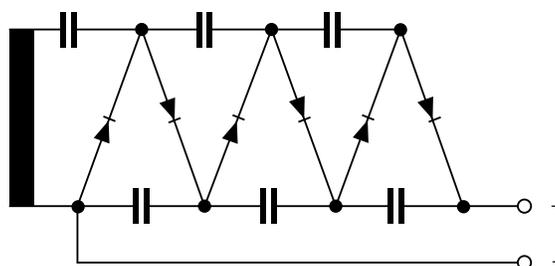
Output in excess of 100 kV_{DC} can be produced depending on the number of switching steps.

Vishay Draloric can supply the capacitor stacks for the voltage multiplier circuits to customers specified designs and requirements. The capacitor stacks and associated high voltage diodes are usually operated in high insulation environments such as oil or inert gas (sulphur hexafluoride SF₆) or are embedded in epoxy resin.

The number of individual capacitors in each stack and certain technical parameters can be varied to meet customer requirements within specified limits.

TYPICAL SCHEMATIC DIAGRAM

Half-Wave Multiplier



Full-Wave Multiplier

