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High Voltage Ceramic Capacitor Multiplier Sets

With Leads, Class 2 Ceramic

FEATURES

- High voltage ratings
- Compact design
- Small sizes
- Many customized solutions available
- Voltage multipliers
- · Completely assembled cascades with stacks and diodes

APPLICATIONS

- Electrostatic paint spraying
- The major applications are x-ray equipment for:
- Medical diagnosis
- Dentistry x-ray application
- Industrial x-ray for material control
- Airport security x-ray scanner

CAPACITANCE RANGE

120 pF to 1.4 nF per single disc

CERAMIC DIELECTRIC

R4000 (Y5U)

RATED VOLTAGE

- 8.0 kV_{DC} per single disc
- 10 kV_{DC} per single disc

DESCRIPTION

Voltage multipliers are AC/DC power conversion devices, comprised of diodes and capacitor stacks, that produce a high potential DC voltage from a lower voltage AC source. Multipliers consist of multiple stacks of up to 14 stages. Each stage is comprised of one diode and one capacitor. A high-frequency generator supplies the input AC voltage via a ferrite transformer.

Output DC voltage up to 100 kV or higher can be produced, depending on the number of stages.

The most common type of voltage multiplier is the half-wave multiplier, also called the Villard cascade.

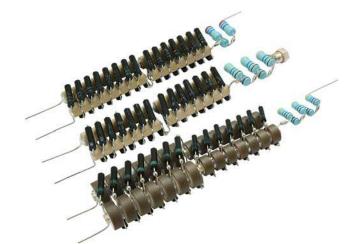
Another multiplier is the full-wave, also called the Delon circuit.

Vishay has the product lines to offer customized voltage multiplier sets:

- Build up to 14 stages or more
- Circuits are completely assembled and soldered with HV diodes / resistors and screwed connections

Please contact us. Our design team will work with you to find an individually solution.

QUICK REFERENCE DATA		
DESCRIPTION	VALUE	
Ceramic Class	2	
Ceramic Dielectric	R4000 (Y5U)	
Туре	RHK	
Voltage (V _{DC})	8000, 10 000	
Min. Capacitance (pF)	120	
Max. Capacitance (pF)	1400	
Mounting	Leaded	



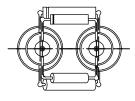


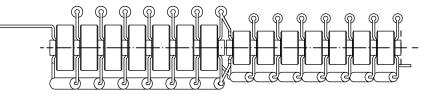
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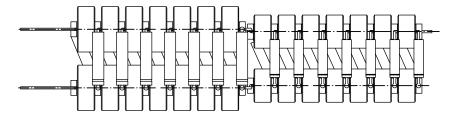
WISHAY. www.vishay.com

Vishay Draloric

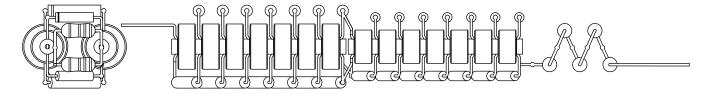
EXAMPLE WITH DIFFERENT SIZES OF DISCS

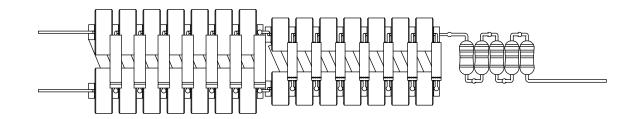






EXAMPLE WITH RESISTORS





Note

For singlestacks see overview: <u>www.vishay.com/capacitors/ceramic/voltage-multipliers/</u>

RELATED DOCUMENTS	
General Information	www.vishay.com/doc?22090

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