

THE VISHAY ADVANTAGE AND WHY IT MATTERS... VOLTAGE MULTIPLIER APPLICATIONS

High Voltage Ceramic Capacitors Radial-Leaded Single-Layer Disc

AC Input Voltage Source	Input Filter	Inverter	High Voltage Transformer	High Voltage Multiplier	High Voltage DC Output

Product Family	Advantage	Why it Matters (Benefit to the Engineer)	Where Should it Be Considered	Best Parameter / Example
0581/483. 1781 1800	High capacitance value of 2 nF	There is no other high voltage capacitor with a capacitance value as high as 2 nF. If 2 nF is needed, a design with two 1 nF caps in parallel is no longer necessary. This saves space and reduces assembly costs while improving reliability.	In applications facing space constraints Applications that require low ripple DC output voltage	Rated voltage: 15 kV _{DC} Capacitance value: 2 nF Dissipation factor: < 1.5 %

Other Customer Benefits	How Is This Achieved?	Example Device / Details	Comments
Guaranteed load life performance 1.25 x U _{Rated} @ 105 °C 1000 h	Perfect adhesion of the coating to the ceramic disc	First failures at 30 kV _{pc} in +105 °C hot oil after 2000 hours	End of life above 5000 hours
Low dissipation factor < 1.5 %	High quality ceramic dielectric along with optimized firing parameters	Capacitance values ≤ 1 nF have dissipation factors < 1 % over the whole operating temperature range of -30 °C to +105 °C	Self-heating is reduced to a minimum