

Electrical Parameters/Characteristics

Item	Parameters/Characteristics
Operating Temperature Range	-55°C to +200°C
Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)	±30 ppm/°C
Aging Rate (Maximum % Capacitance Loss/Decade Hour)	0%
¹ Dielectric Withstanding Voltage (DWV)	See product selection table (product waterfall) for available ratings
² Dissipation Factor (DF) Maximum Limit @ 25°C	0.1%
³ Insulation Resistance (IR) Minimum Limit @ 25°C	1,000 megohm microfarads or 100GΩ (500 VDC applied for 120 ±5 seconds @ 25°C)

¹DWV is the voltage a capacitor can withstand (survive) for a short period of time. It exceeds the nominal and continuous working voltage of the capacitor.

²Capacitance and dissipation factor (DF) measured under the following conditions:

1 MHz ±100 kHz and 1.0 Vrms ±0.2 V if capacitance ≤ 1,000 pF

1 kHz ± 50 Hz and 1.0 Vrms ±0.2 V if capacitance > 1,000 pF

³To obtain IR limit, divide MΩ-μF value by the capacitance and compare to GΩ limit. Select the lower of the two limits.

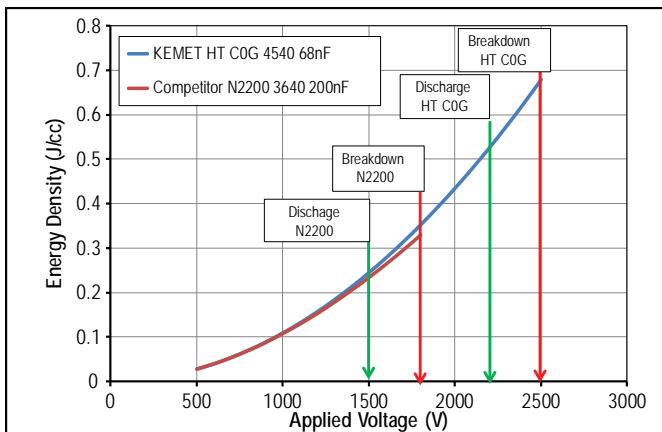
Note: When measuring capacitance it is important to ensure the set voltage level is held constant. The HP4284 and Agilent E4980 have a feature known as Automatic Level Control (ALC). The ALC feature should be switched to "ON."

Post Environmental Limits

High Temperature Life, Biased Humidity, Moisture Resistance					
Dielectric	Rated DC Voltage	Capacitance Value	Dissipation Factor (Maximum %)	Capacitance Shift	Insulation Resistance
COG	All	All	0.5	0.3% or ±0.25 pF	10% of Initial Limit

Electrical Characteristics

Energy Density vs. Applied Voltage



Discharge Current vs. Applied Voltage

