

# 1 Definition of Technical Terms



Technical Terms	Code	Definitions
Formation	--	Process for depositing dielectric aluminum oxide film (Al <sub>2</sub> O <sub>3</sub> ) on the surface of the foil by anodic oxidation.
Formed Foil	--	Foils treated by formation process.
Etched Foil	--	Foils treated by etching process before formation process.
Foil for Anode	--	Foils used as an anode of a capacitor.
Foil for Cathode	--	Foils used as a cathode of a capacitor.
Voltage across Terminals	Vfe	Final voltage applied during formation process.
Dielectric Withstanding Voltage	Vt	Voltage of formed foil measured 3 minutes after reaching rise time (Tr).
Nominal Formation Voltage	Vfs	Nominal value of dielectric withstanding voltage.
Rise Time	Tr	Time at which the applied voltage reaches 90% of nominal formation voltage (Vfs), with a specified electric current applied to formed foil.
Rise Time Voltage	Vr	Voltage attained at the rise time (Tr).
Hydration Process	--	Immersion of foil in deionized water at high temperature for specified time.
Hydration Resistance Test	--	Test to evaluate foil stability after hydration process
Rise Time after Hydration Process	Tr <sub>60</sub>	Time at which the applied voltage reaches 90% of nominal formation voltage (Vfs), with a specified electric current applied to hydrated formed foil.
Dielectric Withstanding Voltage after Hydration Process	Vt <sub>60</sub>	Voltage of formed foil after hydration process measured 3 minutes after rise time (Tr <sub>60</sub> ).
Initial Capacitance	C <sub>0</sub>	Initial capacitance of cathode foil used for ΔC <sub>60</sub> calculation.
Capacitance after Hydration Process	C <sub>60</sub>	Capacitance of cathode foil after hydration process used for ΔC <sub>60</sub> calculation.
Change of Capacitance after Hydration Process	ΔC <sub>60</sub>	$\Delta C_{60} = \{ (C_{60} - C_0) \div C_0 \} \times 100 (\%)$

Note: Vt<sub>60</sub>, Tr<sub>60</sub>, C<sub>60</sub> and ΔC<sub>60</sub> indicate hydration time of 60 minutes.

The above specifications are subject to change without notice