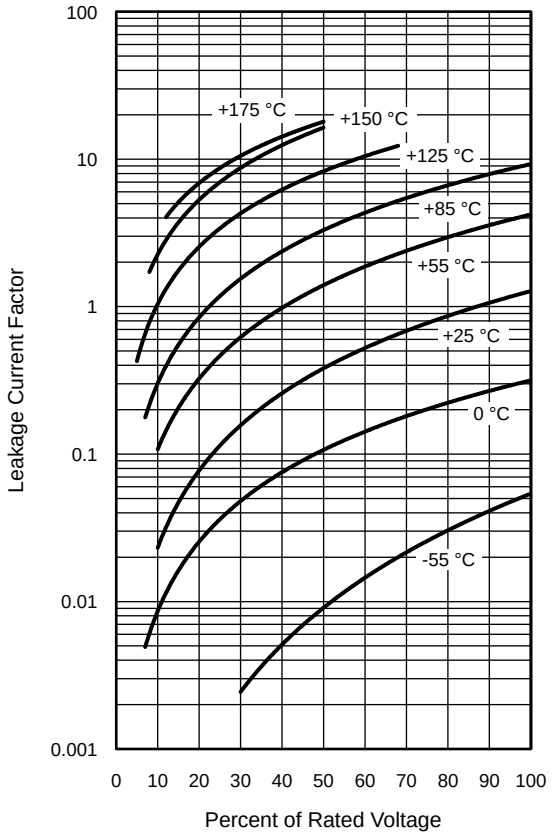
TYPICAL LEAKAGE CURRENT TEMPERATURE FACTOR



Note

€ At +25 °C, the leakage current shall not exceed the value listed in the Standard Ratings table.
At +85 °C, the leakage current shall not exceed 10 times the value listed in the Standard Ratings table.
At +125 °C, the leakage current shall not exceed 12 times the value listed in the Standard Ratings table.
At +150 °C, the leakage current shall not exceed 15 times the value listed in the Standard Ratings table.
At +175 °C, the leakage current shall not exceed 18 times the value listed in the Standard Ratings table.

ENVIRONMENTAL PERFORMANCE CHARACTERISTICS

ITEM	CONDITION	POST TEST PERFORMANCE	
Surge voltage	Post application of surge voltage (as specified in the table above) in series with a 33 Ω resistor at the rate of 30 s ON, 30 s OFF, for 1000 successive test cycles at 85 °C.	Capacitance change Dissipation factor Leakage current	Within ± 10 % of initial value Initial specified limit Initial specified limit
Life test at +85 °C	1000 h application of rated voltage at 85 °C. MIL-STD-202, method 108	Capacitance change Dissipation factor Leakage current	Within -20 % / +10 % of initial value Initial specified limit Shall not exceed 125 % of initial limit
Life test at +125 °C	1000 h application 2/3 of rated voltage at 125 °C. MIL-STD-202, method 108	Capacitance change Dissipation factor Leakage current	Within -20 % / +10 % of initial value Initial specified limit Shall not exceed 125 % of initial limit
Humidity tests	At 60 °C / 90 % RH 1000 h, biased	Capacitance change Dissipation factor Leakage current	Within -10 % / +20 % of initial value Not to exceed 150 % of initial limit Shall not exceed 200 % of initial limit
Thermal shock	MIL-STD-202, method 107, test condition A (-55 °C / +85 °C, for 1000 cycles)	Capacitance change Dissipation factor Leakage current	Within ± 10 % of initial value Initial specified limit Initial specified limit

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MECHANICAL PERFORMANCE CHARACTERISTICS		
TEST CONDITION	CONDITION	POST TEST PERFORMANCE
Terminal strength / shear force test	Apply a pressure load of 17.7 N for 60 s horizontally to the center of capacitor side body.	Capacitance change Within ± 10 % of initial value Dissipation factor Initial specified limit Leakage current Initial specified limit There shall be no mechanical or visual damage to capacitors post -conditioning.
Vibration	MIL-STD-202, method 204, condition D, 10 Hz to 2000 Hz, 20 g peak, 8 h, at rated voltage	Electrical measurements are not applicable, since the same parts are used for shock (specified pulse) test. There shall be no mechanical or visual damage to capacitors post -conditioning.
Shock (specified pulse)	MIL-STD-202, method 213, condition I, 100 g peak	Capacitance change Within ± 10 % of initial value Dissipation factor Initial specified limit Leakage current Initial specified limit There shall be no mechanical or visual damage to capacitors post -conditioning.
Resistance to soldering heat	Recommended reflow profiles temperatures and durations are located with in the Capacitor Series Guides MIL-STD-202, method 210, condition B	Capacitance change Within ± 10 % of initial value Dissipation factor Initial specified limit Leakage current Initial specified limit There shall be no mechanical or visual damage to capacitors post -conditioning.
Solderability and dissolution of metallization	MIL-STD-202, method 208, ANSI/J-STD-002, test B (SnPb) and B1 (lead (Pb)-free). Dissolution of metallization: method D. Does not apply to gold terminations.	There shall be no mechanical or visual damage to capacitors post -conditioning.
Flammability	Encapsulation materials meet UL 94 V-0 with an oxygen index of 32 %.	

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