

INDUCTIVE SELF HEALING POLYESTER CAPACITORS DTSH Capacitors

CONSTRUCTION: Film/foil inductive type internally series construction with aluminum foil as electrode and polyester (PET) film as dielectric and MPET film as connecting electrode, coated with flame retardant epoxy resin

CAPACITANCE RANGE: 0.001 μ F to 0.01 μ F

RATED VOLTAGES: 1250 VDC / 500 VAC, 1600 VDC / 500 VAC, 2000VDC / 500 VAC

CAPACITANCE TOLERANCES: $\pm 5\%$, $\pm 10\%$

APPLICABLE SPECIFICATION: IEC 60384-2

VOLTAGE PROOF: 1.6 times the rated voltage for 2 sec

INSULATION RESISTANCE AT +20°C: > 30000 M Ω

OPERATING TEMPERATURE RANGE: -40°C to +125°C
Between 85°C and 125°C, a voltage derating of 1.25% per °C on the rated voltage has to be applied

RATED TEMPERATURE: 85°C

PITCH: 5 mm, 7.5 mm

CAPACITANCE TOLERANCES: $\pm 5\%$, $\pm 10\%$

INSULATION RESISTANCE AT +20°C: > 30000 M Ω

TAN δ : 0.8% at 1 kHz, 3% at 100 kHz

ENDURANCE:

Test conditions (DC)

Temperature: +85°C $\pm 2^\circ$ C

Test duration: 1000 h

Voltage applied: $1.25 \times V_R$ (DC)

Performance

Capacitance change ($\Delta c/c$): = 5%

DF change ($\Delta tg \delta$): = 0.01 or 1.2 times value measured before the test whichever is higher

Insulation resistance: = 50% of initial limit

Test conditions (AC)

Temperature: +85°C $\pm 2^\circ$ C

Test duration: 1000 h

Voltage applied: $1.25 \times V_R$ (AC)

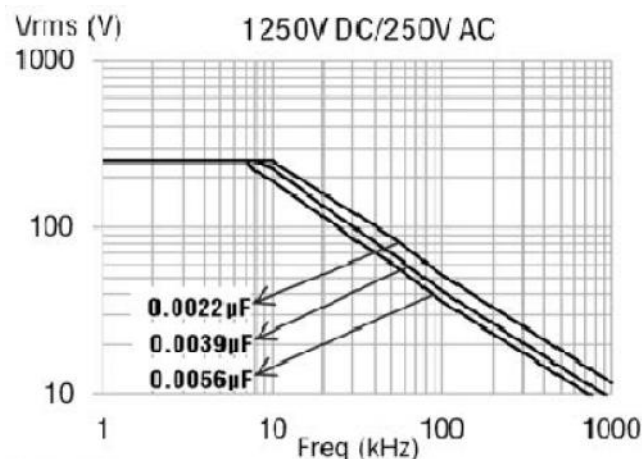
Performance

Capacitance change ($\Delta c/c$): = 5%

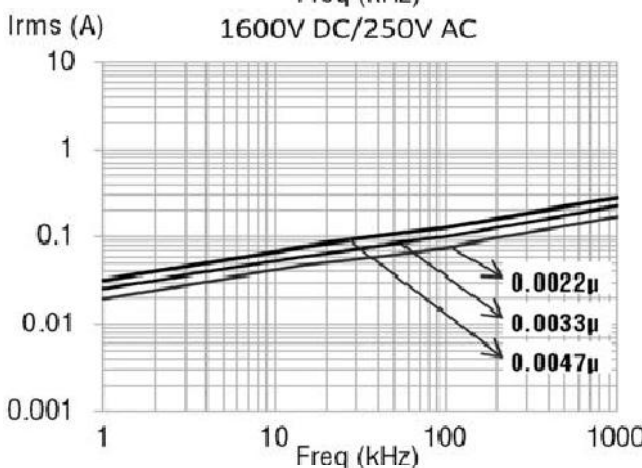
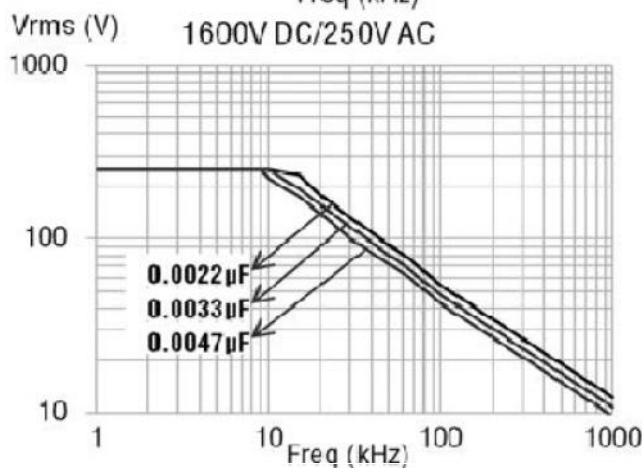
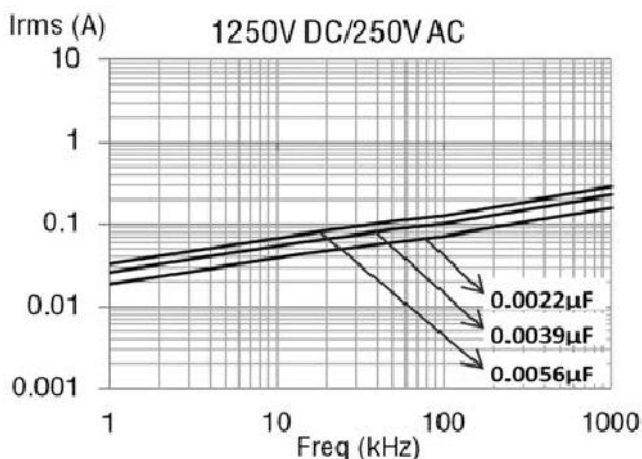
DF change ($\Delta tg \delta$): = 0.01 or 1.2 times value measured before the test whichever is higher

Insulation resistance: = 50% of initial limit

Max. Voltage (Vrms) vs. Frequency
(Sinusoidal Waveform at T = 55°C)



Max. Current (Irms) vs. Frequency
(Sinusoidal Waveform at T = 55°C)



NOTE: The derating curves are based on the actual observed values.

Ordering codes and packaging units
INDUCTIVE SELF HEALING POLYESTER CAPACITORS - DTSH CAPACITORS
Ordering codes and packaging units

Rated Voltage	Rated Cap. (µF)	Dimensions(mm)				S ±0.5	F ±0.5	DV/DT V/µs	Wt. g	Ordering code	Packing units Bulk
		W ±0.5	H ±0.5	L ±0.5	d ±0.05						
1250V DC	0.0033	4.5	17.5	8.0	0.5	5.5±0.5	10000	0.52	80	272 + 3B * ^	500
	0.0039	5.0	17.5	8.5	0.5	5.5±0.5	10000	0.64	80	332 + 3B * ^	500
	0.0047	5.5	17.5	8.5	0.5	5.5±0.5	10000	0.66	80	472 + 3B * ^	500
	0.0056	5.5	17.5	9.0	0.5	5.5±0.5	10000	0.69	80	562 + 3B * ^	500
	0.0062	6.0	17.5	9.0	0.5	5.5±0.5	10000	0.71	80	622 + 3B * ^	500
	0.0068	6.0	17.5	9.5	0.5	5.5±0.5	10000	0.78	80	682 + 3B * ^	500
	0.0082	6.0	17.5	10.0	0.5	5.5±0.5	10000	0.87	80	822 + 3B * ^	500
	0.0100	6.5	18.0	10.0	0.5	5.5±0.5	10000	0.97	80	103 + 3B * ^	500
1600V DC	0.0033	6.0	19.0	9.5	0.5	7.0±0.5	10000	0.65	80	332 + 3C * ^	500
	0.0039	6.0	19.0	9.5	0.5	7.5±0.5	10000	0.8	80	392 + 3C * ^	500
	0.0047	6.5	19.0	10.5	0.5	7.5±0.5	10000	0.83	80	472 + 3C * ^	500
	0.0056	7.0	19.0	11.0	0.5	7.5±0.5	10000	0.86	80	562 + 3C * ^	500
	0.0062	7.5	19.0	11.0	0.5	7.5±0.5	10000	0.89	80	622 + 3C * ^	500
	0.0068	8.0	19.0	11.5	0.5	7.5±0.5	10000	0.97	80	682 + 3C * ^	500
	0.0082	8.5	19.0	12.0	0.5	7.5±0.5	10000	1.08	80	822 + 3C * ^	500
	0.0100	9.0	19.0	12.5	0.5	7.5±0.5	10000	1.20	80	103 + 3C * ^	500

