



505PHC250K

HIGH FREQUENCY/ SWITCHING
Parts are RoHS compliant

APPLICATIONS: industrial controls, Motor speed controls, Resonant circuits, induction heaters, Electronic ballasts, Audio, SMPS

ELECTRICAL SPECIFICATIONS

Capacitance: 5 μ F	Tolerance: -10 % , +10 %
Dissipation Factor: 0.0006 Max at 1000 Hz and 25°C	Temperature Range: -40°C to +85°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C	Above 85°C the rated (DC/AC) voltage must be derated at per N/A°C
Ripple Current: 10 A at 100 kHz and 70°C	WVDC: 250 Volts DC
ESR: 3.4 milliOhms (typical) at 100 kHz and 25°C	SVDC: 400 Volts DC
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length	VAC: 160 Volts AC
dvdt: 40 V/ μ s	

Terminal to Terminal Dielectric strength: 2 times the rated DC voltage when applied between the terminals for 10 seconds

Terminal to case Dielectric strength: 3000 VAC when applied between the terminals and case for 60 seconds

Insulation Resistance (Terminal to Terminal): 30000 MINIMUM after 100 Volts DC is applied for 60 seconds at 20°C

Insulation resistance (Terminal to Case): N/A Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0

Reliability: 300 failures/billion component hours

Load Life: 100000/30000 hours at 70°C with 100% of rated voltage

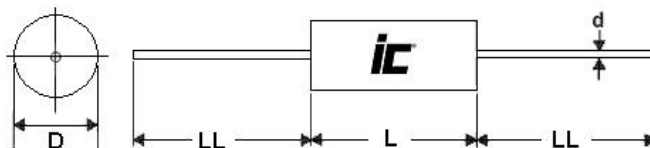
Capacitance Change: $\leq$ 3% of initially measured value

D.F. Change: $\leq$ 200% of maximum specified value

I.R. Change: $>$ 50% of minimum specified value

PHYSICAL DIMENSIONS

Diameter (D): 18.5 mm, MAX mm	Lead Spacing (S): mm, +/- mm
Length (L): 34 mm, MAX mm	Lead Diameter (d): 1 mm, +/-0.05 mm
Lead Finish: Matte Tin	Lead Length (LL): 35mm, +/- MIN mm



2400 East Devon Avenue Suite 292 Des Plaines, IL 60018 (847) 675-1760 FAX (847) 673-2850
Illinois Capacitor (HK) Ltd., Tel: 85227930931, Fax: 85227930731, www.illcap.com.hk
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