

## 405PHC600K

HIGH FREQUENCY/ SWITCHING

Parts are RoHS compliant



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

### ELECTRICAL SPECIFICATIONS

**Capacitance:** 4  $\mu$ F

**Dissipation Factor:** 0.0006 Max at 1000 Hz and 25°C

**Temperature Coefficient:** -200 PPM/°C: -100 PPM/°C, 100 PPM/°C

**Ripple Current:** 13.5 A at 100 kHz and 70°C

**ESR:** 3.6 milliOhms (typical) at 100 kHz and 25°C

**Self Inductance:** 1 Nanohenries maximum per mm of body length and lead length

**dvdt:** 55 V/ $\mu$ s

**Tolerance:** -10 % , +10 %

**Temperature Range:** -40°C to +85°C

Above 85°C the rated (DC/AC) voltage must be derated at per N/A°C

**WVDC:** 600 Volts DC

**SVDC:** 800 Volts DC

**VAC:** 330 Volts AC

**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):** 27 mm, MAX mm

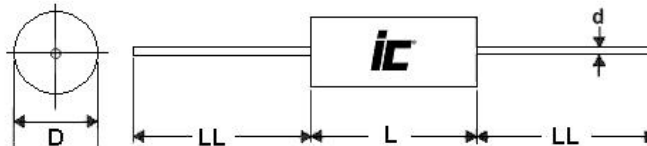
**Length (L):** 46 mm, MAX mm

**Lead Finish:** Matte Tin

**Lead Spacing (S):** mm, +/- mm

**Lead Diameter (d):** 1.2 mm, +/-0.05 mm

**Lead Length (LL):** 35mm, +/- MIN mm



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