C-UD001-630

FEATURES

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.001 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 176.839 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 22 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

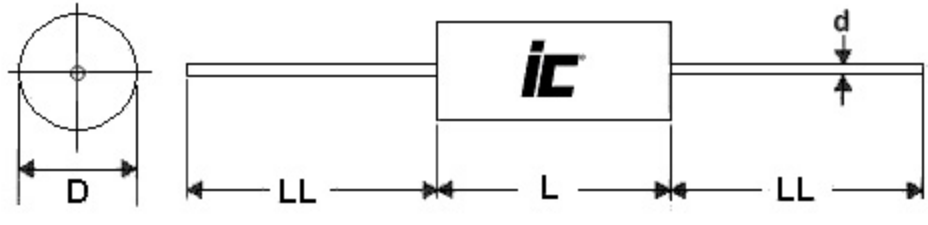
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 6.5 mm, MAX mm
Length (L): 14.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.6 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD0022-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.0033 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 53.588 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 22 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

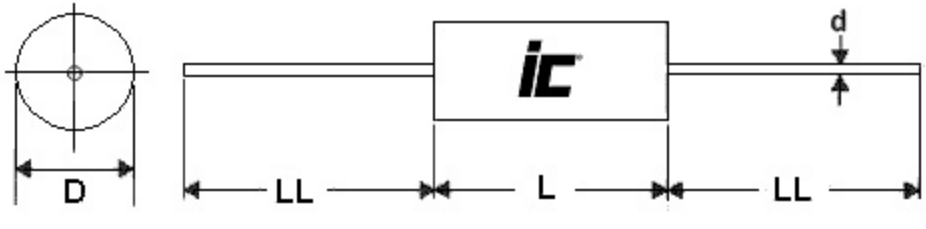
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 6.5 mm, MAX mm
Length (L): 14.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.6 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD0033-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.0033 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 53.588 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 22 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

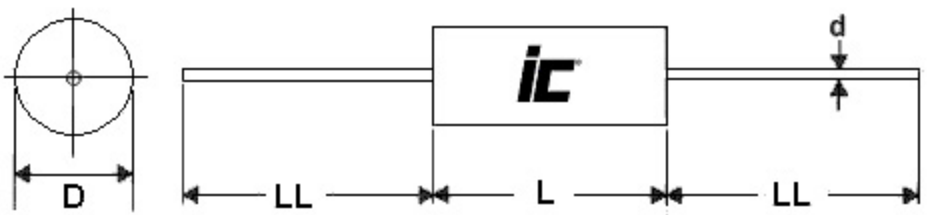
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 6.5 mm, MAX mm
Length (L): 14.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.6 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD0047-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.0047 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 37.625 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 22 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

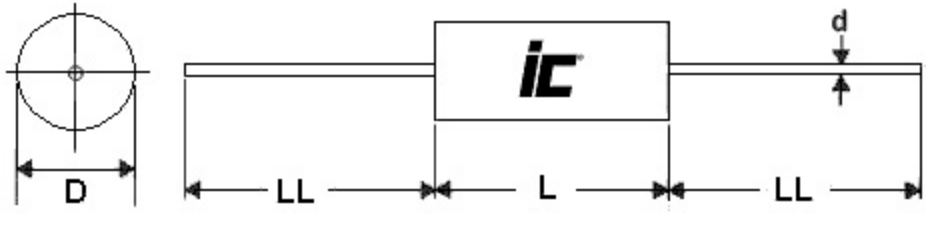
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 6 mm, MAX mm
Length (L): 14.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.6 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD01-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.01 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 17.684 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 22 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

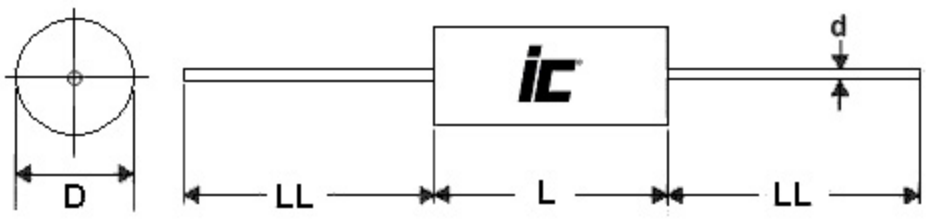
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 6.5 mm, MAX mm
Length (L): 14.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.6 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



C-UD022-630

FEATURES

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.022 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 8.038 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 22 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

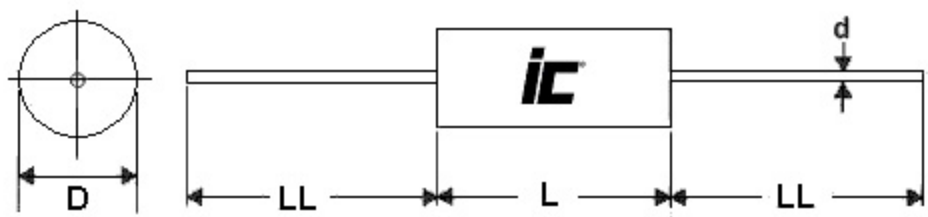
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 8.5 mm, MAX mm
Length (L): 14.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD033-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.033 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 5.359 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 16 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

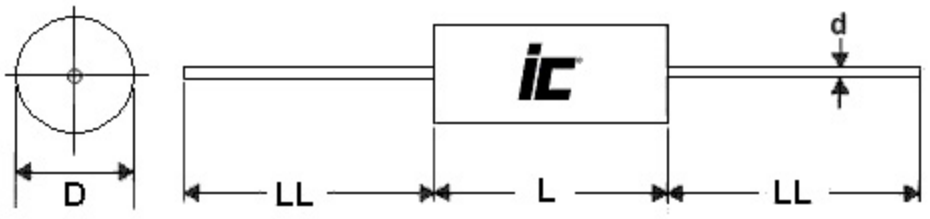
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 8.5 mm, MAX mm
Length (L): 20.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD047-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.047 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 3.763 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 16 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

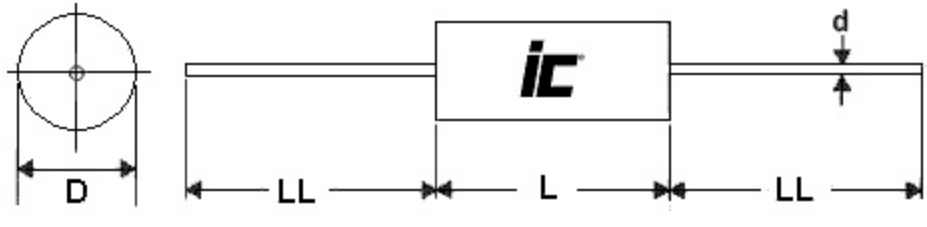
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 9 mm, MAX mm
Length (L): 20.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD1-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.1 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 1.768 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 12 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

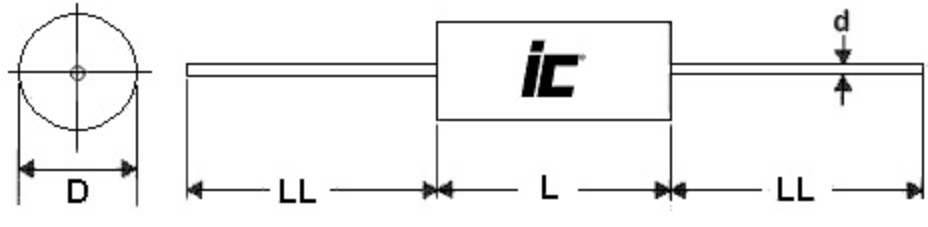
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 10.5 mm, MAX mm
Length (L): 29 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD22-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.22 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 0.804 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 7 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

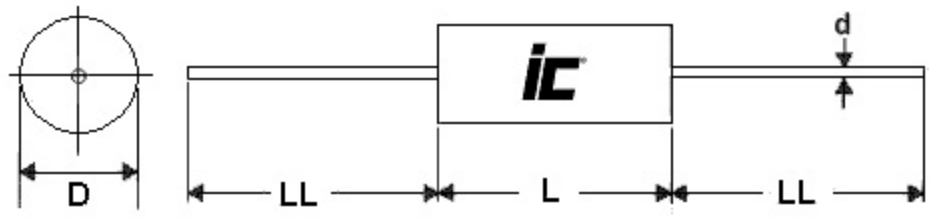
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 12.5 mm, MAX mm
Length (L): 34 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD033-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.033 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 5.359 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 16 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

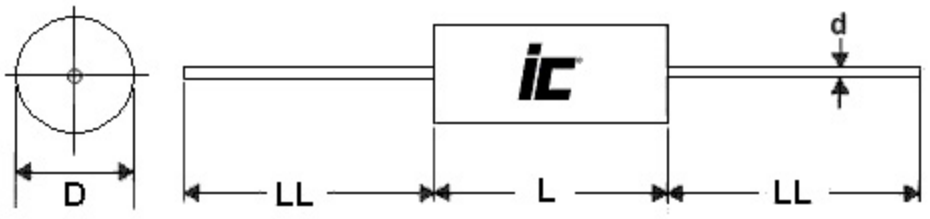
Insulation Resistance (Terminal to Terminal): 30000 Megohms MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 8.5 mm, MAX mm
Length (L): 20.5 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD47-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.47 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 0.376 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 7 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

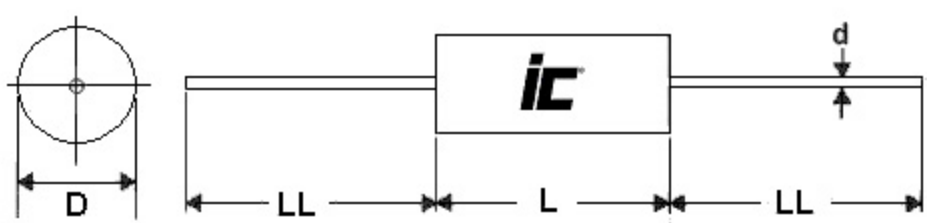
Insulation Resistance (Terminal to Terminal): 10000 MegohmxMicrofarads MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 18 mm, MAX mm
Length (L): 34 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 0.8 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm



FEATURES

C-UD68-630

Axial lead, self healing metallized polypropylene

ELECTRICAL SPECIFICATIONS

Capacitance: 0.68 uF
Dissipation Factor: 0.001 Max at 1000 Hz and 25°C
Temperature Coefficient: -200 PPM/°C: -100 PPM/°C, 100 PPM/°C
Ripple Current: 0 at 0 and 0
ESR: 0.26 Ohms at 1 kHz and 20°C
Self Inductance: 1 Nanohenries maximum per mm of body length and lead length
dvdt: 7 V/µs

Tolerance: -10 % , +10 %
Temperature Range: -55°C to +105°C
Above 85°C the rated (DC/AC) voltage must be derated at per 1.25%°C
WVDC: 630 Volts DC
SVDC: N/A Volts DC
VAC: 250 Volts AC

Terminal to Terminal Dielectric strength: 1.6 times the rated DC voltage when applied between the terminals for 2 seconds

Terminal to case Dielectric strength: 2 VAC when applied between the terminals and case for 2~5 seconds

Insulation Resistance (Terminal to Terminal): 10000 MegohmxMicrofarads MINIMUM after 0 Volts DC is applied for 0 seconds at 0
Reliability: 3 failures/billion component hours 3 FIT
Load Life: 2000 hours at 85°C with 125% of rated voltage
Capacitance Change: ≤3% of initially measured value
D.F. Change: ≤125% of maximum specified value
I.R. Change: >50% of minimum specified value

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

PHYSICAL DIMENSIONS

Diameter (D): 22 mm, MAX mm
Length (L): 34 mm, MAX mm
Lead Finish: Matte Tin

Lead Spacing (S): mm, +/- mm
Lead Diameter (d): 1 mm, +/-0.05 mm
Lead Length (LL): 35mm, +/- MIN mm