U32D Specifications

Item	Characteristics
Operating Temperature Range	−40 to +105°C
Rated Voltage Range	6.3 to 400VDC
Capacitance Range	180μF to 2.2F at +25°C, 120Hz
Capacitance Tolerance	±20% (M) at +25°C, 120Hz
Leakage Current	I = 0.02CV (μA) or 5mA, whichever is smaller, after 5 minutes at +25°C. Where I = Leakage current (μA), C = Nominal capacitance (μF) and V = Rated voltage (V)
Ripple Current Multipliers	Ambient Temperature (°C)

≤ +45°C	+65°C	+85°C	+105°C
1.41	1.29	1.00	0.57

Frequency (Hz)

DC Rated Voltage	Case Diameter	50Hz	120Hz	300Hz	1kHz	10kHz	50kHz
10-50V	Ø35-Ø76	0.95	1.00	1.03	1.05	1.09	1.12
63-80V	Ø35	0.90	1.00	1.06	1.10	1.18	1.22
	Ø51-Ø76	0.95	1.00	1.03	1.05	1.09	1.12
100V	Ø35	0.82	1.00	1.12	1.22	1.30	1.33
	Ø51	0.90	1.00	1.06	1.10	1.18	1.22
	Ø63-Ø76	0.95	1.00	1.03	1.05	1.09	1.12
160-250V	Ø35	0.80	1.00	1.19	1.34	1.46	1.52
	Ø51-Ø63	0.81	1.00	1.14	1.26	1.36	1.41
	Ø76	0.82	1.00	1.12	1.22	1.30	1.33
315-400V	Ø35-Ø76	0.80	1.00	1.19	1.34	1.46	1.52

Life Validation Test	The following specifications shall be satisfied when the capacitors are restored to +25°C after subjecting them to the DC rated voltage for 2,000 hours at +105°C with the rated ripple current applied. Capacitance change: ≤ 20% from initial measurement ESR change : ≤ 200% of initial specified limit Leakage current : ≤ initial specified limit
Shelf Test	The following specifications shall be satisfied when the capacitors are restored to +25°C after exposing them for 500 hours at +105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change: ≤ 20% from initial measurement ESR change : ≤ 200% of initial specified limit Leakage current : ≤ initial specified limit

Part Numbering System for U32D Series

When ordering, always specify complete catalog number for U32D Series.

U32D 200 LG 103 M 63X105 HP

- HP = High Post 10-32 Screw Thread (Standard)
  LP = Low Post 10-32 Screw Thread
  CP = Low Post, High Current 1/4-28 Screw Thread
  (Available only for ØD2.500" and ØD3.000")
  ML = Low Post M5 Screw Thread.
  LL = High Post M5 Screw Thread.
- Case Code: Expressed in Millimeters. See Case Sizes in Tables for Inch Conversions.
- Capacitance Tolerance: M = ±20%
- Capacitance Value: Expressed in Microfarads. The first two digits are significant figures, and the third digit indicates the number of zeros for capacitance of 100μF or more. R indicates the decimal point for capacitance less than 100μF (e.g. R10 = .10μF; 1R0 = 1.0μF; 10R = 10μF; 101 = 100μF; 102 = 1,000μF; 103 = 10,000μF).
- Lead Configuration: LG = Screw Terminals.
- DC Rated Voltage: Expressed in Volts (e.g. 200 = 200WVDC).
- Series Name: Indicates Basic Capacitor Design.

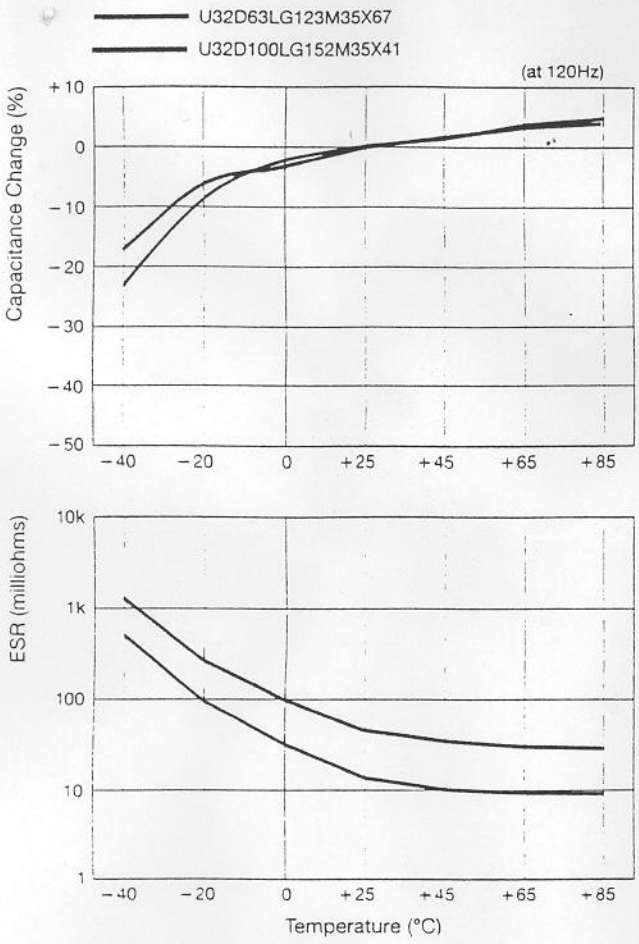
Standard Voltage Ratings - LG/Screw Terminals

Rated Voltage (WVDC)	Capacitance (µF)	Catalog Part Number	Nominal Case Size* D×L (inches)	Maximum ESR (mΩ) at +25°C, 120Hz	Maximum Ripple Current (A rms) at +85°C, 120Hz
400 Volts 450 Volts Surge	180	U32D400LG181M35X41HP	1.375 × 1.625	806.0	1.43
	270	U32D400LG271M35X54HP	1.375 × 2.125	528.4	1.88
	390	U32D400LG391M35X67HP	1.375 × 2.625	364.1	2.30
	470	U32D400LG471M35X79HP	1.375 × 3.125	301.2	2.79
	680	U32D400LG681M35X92HP	1.375 × 3.625	209.0	2.86
	820	U32D400LG821M35X117HP	1.375 × 4.625	172.9	3.50
	1,000	U32D400LG102M35X130HP	1.375 × 5.125	142.0	4.06
	390	U32D400LG391M51X48HP	2.000 × 1.875	374.9	2.55
	560	U32D400LG561M51X54HP	2.000 × 2.125	259.0	3.21
	820	U32D400LG821M51X67HP	2.000 × 2.625	176.0	3.37
	1,000	U32D400LG102M51X79HP	2.000 × 3.125	143.3	3.99
	1,500	U32D400LG152M51X92HP	2.000 × 3.625	96.0	5.22
	2,200	U32D400LG222M51X117HP	2.000 × 4.625	66.0	7.04
	2,700	U32D400LG272M51X143HP	2.000 × 5.625	54.0	8.54
	1,800	U32D400LG182M63X79HP	2.500 × 3.125	82.0	6.10
	2,700	U32D400LG272M63X105HP	2.500 × 4.125	55.0	8.43
	3,300	U32D400LG332M63X117HP	2.500 × 4.625	45.4	9.78
	3,900	U32D400LG392M63X130HP	2.500 × 5.125	39.0	11.13
	3,300	U32D400LG332M76X92HP	3.000 × 3.625	48.0	9.73
	3,900	U32D400LG392M76X105HP	3.000 × 4.125	40.3	11.18
	4,700	U32D400LG472M76X117HP	3.000 × 4.625	34.0	12.86
	5,600	U32D400LG562M76X130HP	3.000 × 5.125	29.0	14.69
	10,000	U32D400LG103M76X219HP	3.000 × 8.625	17.0	24.81

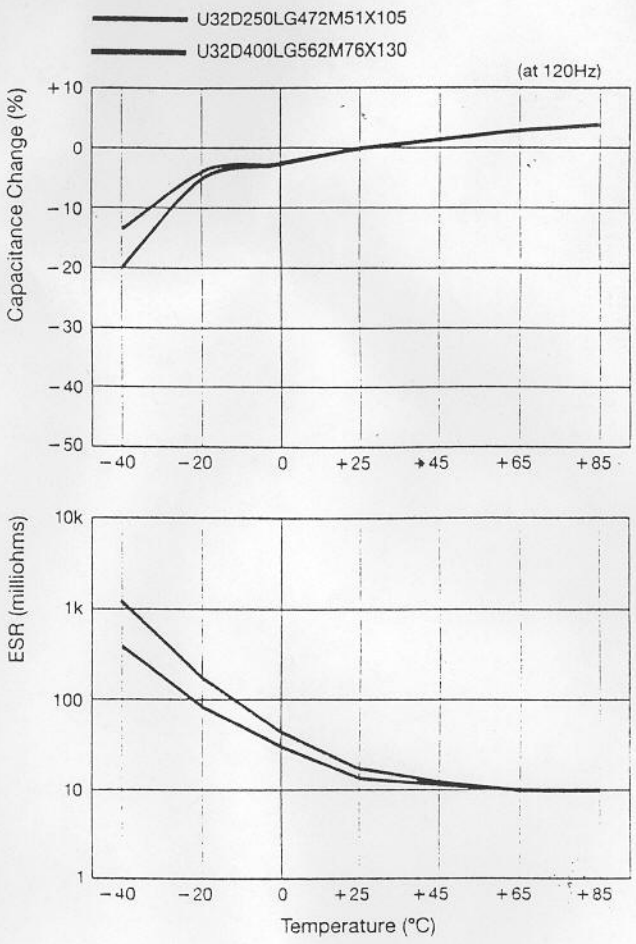
*The case sizes in table are with no sleeve, refer to diagram for case sizes with sleeve.

U32D 400 LG 392 M 63X130 HP

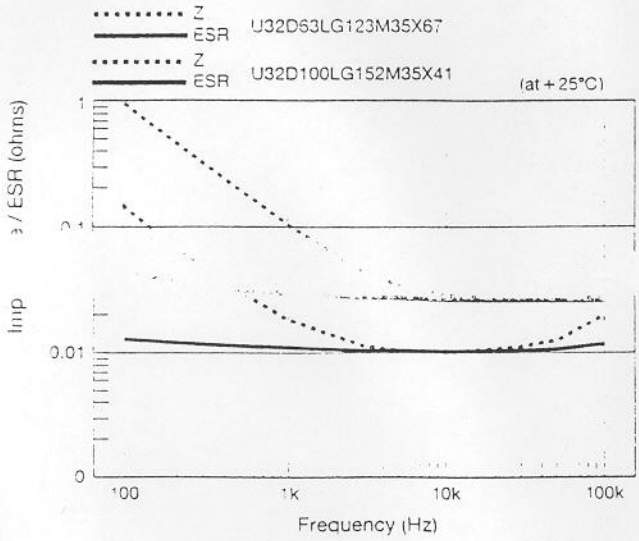
Temperature Characteristics



Temperature Characteristics



Impedance/ESR – Frequency Characteristics



Impedance/ESR – Frequency Characteristics