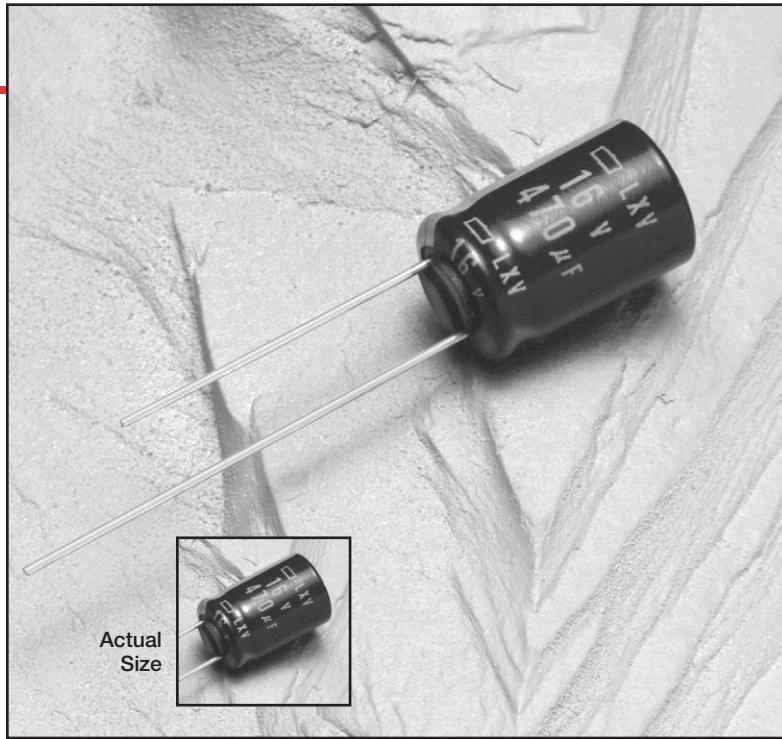


# LXV Series

UNITED  
CHEMI-CON

- Miniature
- Low Impedance
- Large Capacitance
- Solvent Proof
- +105°C Maximum Temperature



The new LXV series capacitors have a very low impedance and are designed for use in situations at high frequencies. One example for using the LXV series would be for switching power supplies. These capacitors have many characteristics that make them ideal for these situations including a wide temperature range, large capacitance values and long life.

The LXV series capacitors were developed to withstand HCFC cleaning agents for five minutes by ultrasonic, vapor or immersion. This solvent proof design allows all circuit board components to be cleaned together, at the same time, without resorting to more expensive epoxy end-sealed capacitors. Refer to the Mini-Glossary for recommended cleaning conditions.

## Summary of Specifications

- Radial lead terminals.
- Capacitance range: 5.6 to 15,000 $\mu$ F.
- Voltage range: 6.3 to 100VDC.
- Operating temperature range: -55°C to +105°C.
- Leakage current: 0.01CV or 3 $\mu$ A, whichever is greater, after 2 minutes at +20°C.
- Standard capacitance tolerance:  $\pm 20\%$
- Nominal case size (D x L): 5 x 11.5mm to 18 x 40mm.
- Rated lifetime: 2,000 to 5,000 hours at +105°C with the rated ripple current applied, depending on case size.

MINIATURE - 105°C  
**LXV**

# LXV Series

## LXV Specifications

Item	Characteristics																																																																																					
Operating Temperature Range	-55 to +105°C																																																																																					
Rated Voltage Range	6.3 to 100VDC																																																																																					
Capacitance Range	5.6 to 15,000µF																																																																																					
Capacitance Tolerance	± 20% (M) at +20°C, 120Hz																																																																																					
Leakage Current	I = 0.01CV or 3µA, whichever is greater, after 2 minutes at +20°C. Where I = Leakage current (µA), C = Nominal capacitance (µF) and V = Rated voltage (V)																																																																																					
Dissipation Factor (Tan δ)	At +20°C, 120Hz  <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <td>Tan δ (DF)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </table> When nominal capacitance exceeds 1,000µF, add 0.02 to the values above for each 1,000µF increase.										Rated Voltage (V)	6.3	10	16	25	35	50	63	80	100	Tan δ (DF)	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.09	0.08																																																								
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Tan δ (DF)	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.09	0.08																																																																													
Impedance at 100kHz	At 100kHz, maximum impedance at +20°C and -10°C is specified in the Ratings Tables.																																																																																					
Low Temperature Characteristics	At 120Hz, capacitance change at -55°C shall be within 30% of the specified value at +20°C. At 120Hz, impedance at -55°C shall not exceed 400% (6.3V) or 300% (10 to 63V) of the specified value at +20°C.																																																																																					
Ripple Current Multipliers <i>Refer to Section 4 of the Mini-Glossary for explanation of Ripple Current Multipliers.</i>	<p>Ambient Temperature (°C)</p> <table border="1"> <tr> <td>≤ +65°C</td> <td>+85°C</td> <td>+105°C</td> </tr> <tr> <td>2.23</td> <td>1.73</td> <td>1.00</td> </tr> </table> <p>Frequency (Hz)</p> <table border="1"> <thead> <tr> <th>DC Rated Voltage</th> <th>Case Diameter</th> <th>120Hz</th> <th>1kHz</th> <th>10kHz</th> <th>100kHz</th> </tr> </thead> <tbody> <tr> <td rowspan="3">6.3V, 10V</td> <td>Ø5-Ø8</td> <td>0.65</td> <td>0.83</td> <td>0.95</td> <td>1.00</td> </tr> <tr> <td>Ø10-Ø12.5</td> <td>0.70</td> <td>0.85</td> <td>0.96</td> <td>1.00</td> </tr> <tr> <td>Ø16-Ø18</td> <td>0.85</td> <td>0.92</td> <td>0.97</td> <td>1.00</td> </tr> <tr> <td rowspan="3">16V, 25V</td> <td>Ø5-Ø8</td> <td>0.55</td> <td>0.76</td> <td>0.91</td> <td>1.00</td> </tr> <tr> <td>Ø10-Ø12.5</td> <td>0.65</td> <td>0.83</td> <td>0.93</td> <td>1.00</td> </tr> <tr> <td>Ø16-Ø18</td> <td>0.70</td> <td>0.87</td> <td>0.96</td> <td>1.00</td> </tr> <tr> <td rowspan="3">35V, 50V</td> <td>Ø5-Ø8</td> <td>0.40</td> <td>0.66</td> <td>0.85</td> <td>1.00</td> </tr> <tr> <td>Ø10-Ø12.5</td> <td>0.50</td> <td>0.73</td> <td>0.89</td> <td>1.00</td> </tr> <tr> <td>Ø16-Ø18</td> <td>0.60</td> <td>0.81</td> <td>0.94</td> <td>1.00</td> </tr> <tr> <td rowspan="3">63V, 80V, 100V</td> <td>Ø5-Ø8</td> <td>0.20</td> <td>0.55</td> <td>0.80</td> <td>1.00</td> </tr> <tr> <td>Ø10-Ø12.5</td> <td>0.35</td> <td>0.65</td> <td>0.85</td> <td>1.00</td> </tr> <tr> <td>Ø16-Ø18</td> <td>0.50</td> <td>0.75</td> <td>0.90</td> <td>1.00</td> </tr> </tbody> </table>										≤ +65°C	+85°C	+105°C	2.23	1.73	1.00	DC Rated Voltage	Case Diameter	120Hz	1kHz	10kHz	100kHz	6.3V, 10V	Ø5-Ø8	0.65	0.83	0.95	1.00	Ø10-Ø12.5	0.70	0.85	0.96	1.00	Ø16-Ø18	0.85	0.92	0.97	1.00	16V, 25V	Ø5-Ø8	0.55	0.76	0.91	1.00	Ø10-Ø12.5	0.65	0.83	0.93	1.00	Ø16-Ø18	0.70	0.87	0.96	1.00	35V, 50V	Ø5-Ø8	0.40	0.66	0.85	1.00	Ø10-Ø12.5	0.50	0.73	0.89	1.00	Ø16-Ø18	0.60	0.81	0.94	1.00	63V, 80V, 100V	Ø5-Ø8	0.20	0.55	0.80	1.00	Ø10-Ø12.5	0.35	0.65	0.85	1.00	Ø16-Ø18	0.50	0.75	0.90	1.00
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Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to +20°C after subjecting them to the DC rated voltage for the specified test time at +105°C with the rated ripple current applied. The sum of DC voltage and peak AC voltage must not exceed the full rated voltage of the capacitors.</p> <table> <tr> <td>Case Diameter</td> <td>Test Time</td> </tr> <tr> <td>Ø5 &amp; Ø6.3mm</td> <td>2,000 hours</td> </tr> <tr> <td>Ø8 &amp; Ø10mm</td> <td>3,000 hours</td> </tr> <tr> <td>Ø12.5mm &amp; above</td> <td>5,000 hours</td> </tr> </table> <p>Capacitance change: ≤ ± 20% of initial measured value Tan δ (DF) : ≤ 200% of initial specified value Leakage current : ≤ initial specified value</p>										Case Diameter	Test Time	Ø5 & Ø6.3mm	2,000 hours	Ø8 & Ø10mm	3,000 hours	Ø12.5mm & above	5,000 hours																																																																				
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Ø12.5mm & above	5,000 hours																																																																																					
Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to +20°C after exposing them for 1,000 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.</p> <p>Capacitance change: ≤ ± 20% of initial measured value Tan δ (DF) : ≤ 200% of initial specified value Leakage current : ≤ initial specified value</p>																																																																																					
Others	Satisfies characteristic W of JIS C5141																																																																																					

# LXV Series

## Diagram of Dimensions

VB/Radial Lead		Unit: mm																														
		<table border="1"> <thead> <tr> <th>ØD</th><th>ØD' max.</th><th>L' max.</th><th>Ød</th><th>F ± 0.5</th></tr> </thead> <tbody> <tr> <td>5</td><td>ØD + 0.5</td><td>L + 1.5</td><td>0.5</td><td>2.0</td></tr> <tr> <td>6.3</td><td>ØD + 0.5</td><td>L + 1.5</td><td>0.5</td><td>2.5</td></tr> <tr> <td>8</td><td>ØD + 0.5</td><td>L + 1.5</td><td>0.6</td><td>3.5</td></tr> <tr> <td>10, 12.5</td><td>ØD + 0.5</td><td>L + 1.5</td><td>0.6</td><td>5.0</td></tr> <tr> <td>16, 18</td><td>ØD + 0.5</td><td>L + 1.5</td><td>0.8</td><td>7.5</td></tr> </tbody> </table>	ØD	ØD' max.	L' max.	Ød	F ± 0.5	5	ØD + 0.5	L + 1.5	0.5	2.0	6.3	ØD + 0.5	L + 1.5	0.5	2.5	8	ØD + 0.5	L + 1.5	0.6	3.5	10, 12.5	ØD + 0.5	L + 1.5	0.6	5.0	16, 18	ØD + 0.5	L + 1.5	0.8	7.5
ØD	ØD' max.	L' max.	Ød	F ± 0.5																												
5	ØD + 0.5	L + 1.5	0.5	2.0																												
6.3	ØD + 0.5	L + 1.5	0.5	2.5																												
8	ØD + 0.5	L + 1.5	0.6	3.5																												
10, 12.5	ØD + 0.5	L + 1.5	0.6	5.0																												
16, 18	ØD + 0.5	L + 1.5	0.8	7.5																												
For optional lead configurations and tape and ammo packaging, refer to the beginning of the Miniature Section.																																

## Part Numbering System for LXV Series

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

<b>LXV</b>	<b>16</b>	<b>VB</b>	<b>471</b>	<b>M</b>	<b>10X16</b>	<b>LL</b>
						Lead Length: LL is Standard.
						Case Code: See Case Sizes in Tables.
						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. R47 = .47µF; 4R7 = 4.7µF; 47R = 47µF; 471 = 470µF; 472 = 4,700µF; 473 = 47,000µF).
						Lead Configuration: VB = Radial Lead Terminals.
						DC Rated Voltage: Expressed in Volts (e.g. 16 = 16WVDC).
						Series Name: Indicates Basic Capacitor Design.

## Standard Voltage Ratings - VB/Radial Lead

Rated Voltage (WVDC)	Capacitance (µF)	Catalog Part Number	Nominal Case Size* D × L (mm)	Maximum Impedance (Ω) at		Maximum Ripple Current (mA rms) at +105°C, 100kHz
				+20°C, 100kHz	-10°C, 100kHz	
<b>6.3 Volts 8 Volts Surge</b>	120	LXV6.3VB121M5X11LL	5 × 11.5	0.72	1.8	165
	220	LXV6.3VB221M6X11LL	6.3 × 11.5	0.38	0.95	255
	330	LXV6.3VB331M6X15LL	6.3 × 15	0.27	0.68	330
	390	LXV6.3VB391M8X12LL	8 × 12	0.2	0.5	415
	470	LXV6.3VB471M10X12LL	10 × 12.5	0.12	0.3	625
	560	LXV6.3VB561M8X15LL	8 × 15	0.16	0.4	495
	680	LXV6.3VB681M10X16LL	10 × 16	0.084	0.21	825
	820	LXV6.3VB821M8X20LL	8 × 20	0.11	0.28	640
	1,200	LXV6.3VB122M10X20LL	10 × 20	0.062	0.16	1,040
	1,500	LXV6.3VB152M10X25LL	10 × 25	0.052	0.13	1,260
	2,200	LXV6.3VB222M10X30LL	10 × 30	0.044	0.11	1,440
	2,200	LXV6.3VB222M12X20LL	12.5 × 20	0.046	0.12	1,340
	2,700	LXV6.3VB272M12X25LL	12.5 × 25	0.034	0.085	1,690
	3,900	LXV6.3VB392M12X30LL	12.5 × 30	0.03	0.075	1,950

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

# LXV Series

## Standard Voltage Ratings - VB/Radial Lead

LXV  
MINIATURE - 105°C

Rated Voltage (WVDC)	Capacitance (μF)	Catalog Part Number	Nominal Case Size* D × L (mm)	Maximum Impedance (Ω) at		Maximum Ripple Current (mA rms) at +105°C, 100kHz
				+20°C, 100kHz	-10°C, 100kHz	
<b>6.3 Volts</b> <b>8 Volts Surge</b>	3,900	LXV6.3VB392M16X20LL	16 × 20	0.038	0.095	1,630
	4,700	LXV6.3VB472M12X35LL	12.5 × 35	0.027	0.068	2,200
	5,600	LXV6.3VB562M12X40LL	12.5 × 40	0.024	0.06	2,390
	5,600	LXV6.3VB562M16X25LL	16 × 25	0.028	0.07	2,070
	5,600	LXV6.3VB562M18X20LL	18 × 20	0.036	0.09	1,750
	6,800	LXV6.3VB682M16X30LL	16 × 30	0.025	0.063	2,350
	6,800	LXV6.3VB682M18X25LL	18 × 25	0.027	0.068	2,130
	8,200	LXV6.3VB822M16X35LL	16 × 35	0.022	0.055	2,550
	10,000	LXV6.3VB103M16X40LL	16 × 40	0.018	0.045	2,900
	10,000	LXV6.3VB103M18X30LL	18 × 30	0.024	0.06	2,410
	12,000	LXV6.3VB123M18X35LL	18 × 35	0.021	0.053	2,660
	15,000	LXV6.3VB153M18X40LL	18 × 40	0.017	0.043	3,010
<b>10 Volts</b> <b>13 Volts Surge</b>	82	LXV10VB82RM5X11LL	5 × 11.5	0.72	1.8	165
	180	LXV10VB181M6X11LL	6.3 × 11.5	0.38	0.95	255
	270	LXV10VB271M6X15LL	6.3 × 15	0.27	0.68	330
	330	LXV10VB331M8X12LL	8 × 12	0.2	0.5	415
	390	LXV10VB391M10X12LL	10 × 12.5	0.12	0.3	625
	470	LXV10VB471M8X15LL	8 × 15	0.16	0.4	495
	680	LXV10VB681M8X20LL	8 × 20	0.11	0.28	640
	680	LXV10VB681M10X16LL	10 × 16	0.084	0.21	825
	1,000	LXV10VB102M10X20LL	10 × 20	0.062	0.16	1,040
	1,200	LXV10VB122M10X25LL	10 × 25	0.052	0.13	1,260
	1,500	LXV10VB152M10X30LL	10 × 30	0.044	0.11	1,440
	1,800	LXV10VB182M12X20LL	12.5 × 20	0.046	0.12	1,340
	2,200	LXV10VB222M12X25LL	12.5 × 25	0.034	0.085	1,690
	2,700	LXV10VB272M12X30LL	12.5 × 30	0.03	0.075	1,950
	3,300	LXV10VB332M12X35LL	12.5 × 35	0.027	0.068	2,200
	3,300	LXV10VB332M16X20LL	16 × 20	0.038	0.095	1,630
	3,900	LXV10VB392M12X40LL	12.5 × 40	0.024	0.06	2,390
	3,900	LXV10VB392M16X25LL	16 × 25	0.028	0.07	2,070
	3,900	LXV10VB392M18X20LL	18 × 20	0.036	0.09	1,750
	5,600	LXV10VB562M16X30LL	16 × 30	0.025	0.063	2,350
	5,600	LXV10VB562M18X25LL	18 × 25	0.027	0.068	2,130
	6,800	LXV10VB682M16X35LL	16 × 35	0.022	0.055	2,550
	6,800	LXV10VB682M18X30LL	18 × 30	0.024	0.06	2,410
	8,200	LXV10VB822M16X40LL	16 × 40	0.018	0.045	2,900
	8,200	LXV10VB822M18X35LL	18 × 35	0.021	0.053	2,660
	10,000	LXV10VB103M18X40LL	18 × 40	0.017	0.043	3,010
<b>16 Volts</b> <b>20 Volts Surge</b>	56	LXV16VB56RM5X11LL	5 × 11.5	0.72	1.8	165
	120	LXV16VB121M6X11LL	6.3 × 11.5	0.38	0.95	255
	180	LXV16VB181M6X15LL	6.3 × 15	0.27	0.68	330
	270	LXV16VB271M8X12LL	8 × 12	0.2	0.5	415
	270	LXV16VB271M10X12LL	10 × 12.5	0.12	0.3	625
	330	LXV16VB331M8X15LL	8 × 15	0.16	0.4	495
	470	LXV16VB471M8X20LL	8 × 20	0.11	0.28	640
	470	LXV16VB471M10X16LL	10 × 16	0.084	0.21	825
	680	LXV16VB681M10X20LL	10 × 20	0.062	0.16	1,040
	820	LXV16VB821M10X25LL	10 × 25	0.052	0.13	1,260
	1,200	LXV16VB122M10X30LL	10 × 30	0.044	0.11	1,440
	1,200	LXV16VB122M12X20LL	12.5 × 20	0.046	0.12	1,340
	1,500	LXV16VB152M12X25LL	12.5 × 25	0.034	0.085	1,690
	2,200	LXV16VB222M12X30LL	12.5 × 30	0.03	0.075	1,950
	2,200	LXV16VB222M16X20LL	16 × 20	0.038	0.095	1,630
	2,700	LXV16VB272M12X35LL	12.5 × 35	0.027	0.068	2,200
	2,700	LXV16VB272M16X25LL	16 × 25	0.028	0.07	2,070
	3,300	LXV16VB332M12X40LL	12.5 × 40	0.024	0.06	2,390
	3,300	LXV16VB332M16X30LL	16 × 30	0.036	0.09	1,750
	3,900	LXV16VB392M16X30LL	16 × 30	0.025	0.063	2,350

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

# LXV Series

## Standard Voltage Ratings - VB/Radial Lead

Rated Voltage (WVDC)	Capacitance ( $\mu\text{F}$ )	Catalog Part Number	Nominal Case Size* D × L (mm)	Maximum Impedance ( $\Omega$ ) at		Maximum Ripple Current (mA rms) at +105°C, 100kHz
				+20°C, 100kHz	-10°C, 100kHz	
<b>16 Volts 20 Volts Surge</b>	3,900	LXV16VB392M18X25LL	18 × 25	0.027	0.068	2,130
	4,700	LXV16VB472M16X35LL	16 × 35	0.022	0.055	2,550
	5,600	LXV16VB562M16X40LL	16 × 40	0.018	0.045	2,900
	5,600	LXV16VB562M18X30LL	18 × 30	0.024	0.06	2,410
	6,800	LXV16VB682M18X35LL	18 × 35	0.021	0.053	2,660
	8,200	LXV16VB822M18X40LL	18 × 40	0.017	0.043	3,010
<b>25 Volts 32 Volts Surge</b>	39	LXV25VB39RM5X11LL	5 × 11.5	0.72	1.8	165
	82	LXV25VB82RM6X11LL	6.3 × 11.5	0.38	0.95	255
	120	LXV25VB121M6X15LL	6.3 × 15	0.27	0.68	330
	150	LXV25VB151M8X12LL	8 × 12	0.2	0.5	415
	180	LXV25VB181M10X12LL	10 × 12.5	0.12	0.3	625
	220	LXV25VB221M8X15LL	8 × 15	0.16	0.4	495
	330	LXV25VB331M8X20LL	8 × 20	0.11	0.28	640
	330	LXV25VB331M10X16LL	10 × 16	0.084	0.21	825
	470	LXV25VB471M10X20LL	10 × 20	0.062	0.16	1,040
	560	LXV25VB561M10X25LL	10 × 25	0.052	0.13	1,260
	820	LXV25VB821M10X30LL	10 × 30	0.044	0.11	1,440
	820	LXV25VB821M12X20LL	12.5 × 20	0.046	0.12	1,340
	1,000	LXV25VB102M12X25LL	12.5 × 25	0.034	0.085	1,690
	1,500	LXV25VB152M12X30LL	12.5 × 30	0.03	0.075	1,950
	1,500	LXV25VB152M16X20LL	16 × 20	0.038	0.095	1,630
	1,800	LXV25VB182M12X35LL	12.5 × 35	0.027	0.068	2,200
	1,800	LXV25VB182M16X25LL	16 × 25	0.028	0.07	2,070
	2,200	LXV25VB222M12X40LL	12.5 × 40	0.024	0.06	2,390
	2,200	LXV25VB222M18X20LL	18 × 20	0.036	0.09	1,750
	2,700	LXV25VB272M16X30LL	16 × 30	0.025	0.063	2,350
	2,700	LXV25VB272M18X25LL	18 × 25	0.027	0.068	2,130
	3,300	LXV25VB332M16X35LL	16 × 35	0.022	0.055	2,550
	3,300	LXV25VB332M18X30LL	18 × 30	0.024	0.06	2,410
	3,900	LXV25VB392M16X40LL	16 × 40	0.018	0.045	2,900
	3,900	LXV25VB392M18X35LL	18 × 35	0.021	0.053	2,660
	4,700	LXV25VB472M18X40LL	18 × 40	0.017	0.043	3,010
<b>35 Volts 44 Volts Surge</b>	27	LXV35VB27RM5X11LL	5 × 11.5	0.72	1.8	165
	56	LXV35VB56RM6X11LL	6.3 × 11.5	0.38	0.95	255
	82	LXV35VB82RM6X15LL	6.3 × 15	0.27	0.68	330
	120	LXV35VB121M8X12LL	8 × 12	0.2	0.5	415
	120	LXV35VB121M10X12LL	10 × 12.5	0.12	0.3	625
	180	LXV35VB181M8X15LL	8 × 15	0.16	0.4	495
	220	LXV35VB221M8X20LL	8 × 20	0.11	0.28	640
	220	LXV35VB221M10X16LL	10 × 16	0.084	0.21	825
	330	LXV35VB331M10X20LL	10 × 20	0.062	0.16	1,040
	390	LXV35VB391M10X25LL	10 × 25	0.052	0.13	1,260
	560	LXV35VB561M10X30LL	10 × 30	0.044	0.11	1,440
	560	LXV35VB561M12X20LL	12.5 × 20	0.046	0.12	1,340
	680	LXV35VB681M12X25LL	12.5 × 25	0.034	0.085	1,690
	1,000	LXV35VB102M12X30LL	12.5 × 30	0.03	0.075	1,950
	1,000	LXV35VB102M16X20LL	16 × 20	0.038	0.095	1,630
	1,200	LXV35VB122M12X35LL	12.5 × 35	0.027	0.068	2,200
	1,200	LXV35VB122M16X25LL	16 × 25	0.028	0.07	2,070
	1,500	LXV35VB152M12X40LL	12.5 × 40	0.024	0.06	2,390
	1,500	LXV35VB152M18X20LL	18 × 20	0.036	0.09	1,750
	1,800	LXV35VB182M16X30LL	16 × 30	0.025	0.063	2,350
	1,800	LXV35VB182M18X25LL	18 × 25	0.027	0.068	2,130
	2,200	LXV35VB222M16X35LL	16 × 35	0.022	0.055	2,550
	2,200	LXV35VB222M18X30LL	18 × 30	0.024	0.06	2,410
	2,700	LXV35VB272M16X40LL	16 × 40	0.018	0.045	2,900
	2,700	LXV35VB272M18X35LL	18 × 35	0.021	0.053	2,660
	3,300	LXV35VB332M18X40LL	18 × 40	0.017	0.043	3,010

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

**LXV**  
**MINIATURE -105°C**

# LXV Series

## Standard Voltage Ratings - VB/Radial Lead

**LXV**  
**MINIATURE - 105°C**

Rated Voltage (WVDC)	Capacitance (μF)	Catalog Part Number	Nominal Case Size*	Maximum Impedance (Ω) at		Maximum Ripple Current (mA rms) at +105°C, 100kHz
			D × L (mm)	+20°C, 100kHz	-10°C, 100kHz	
<b>50 Volts</b> 63 Volts Surge	18	LXV50VB18RM5X11LL	5 × 11.5	1.1	3.3	130
	39	LXV50VB39RM6X11LL	6.3 × 11.5	0.56	1.6	220
	56	LXV50VB56RM6X15LL	6.3 × 15	0.41	1.2	310
	68	LXV50VB68RM8X12LL	8 × 12	0.29	0.84	340
	82	LXV50VB82RM8X15LL	8 × 15	0.25	0.75	470
	82	LXV50VB82RM10X12LL	10 × 12.5	0.16	0.4	480
	120	LXV50VB121M8X20LL	8 × 20	0.18	0.52	610
	120	LXV50VB121M10X16LL	10 × 16	0.12	0.3	755
	180	LXV50VB181M10X20LL	10 × 20	0.088	0.22	945
	220	LXV50VB221M10X25LL	10 × 25	0.068	0.17	1,150
	330	LXV50VB331M10X30LL	10 × 30	0.059	0.15	1,260
	330	LXV50VB331M12X20LL	12.5 × 20	0.059	0.15	1,190
	470	LXV50VB471M12X25LL	12.5 × 25	0.045	0.11	1,490
	560	LXV50VB561M12X30LL	12.5 × 30	0.039	0.098	1,720
	680	LXV50VB681M12X35LL	12.5 × 35	0.033	0.083	1,890
	680	LXV50VB681M16X20LL	16 × 20	0.043	0.11	1,420
	820	LXV50VB821M12X40LL	12.5 × 40	0.029	0.073	2,030
	820	LXV50VB821M16X25LL	16 × 25	0.033	0.083	1,880
	820	LXV50VB821M18X20LL	18 × 20	0.039	0.098	1,520
	1,000	LXV50VB102M16X30LL	16 × 30	0.029	0.073	2,150
	1,000	LXV50VB102M18X25LL	18 × 25	0.03	0.075	1,930
	1,200	LXV50VB122M16X35LL	16 × 35	0.025	0.063	2,320
	1,500	LXV50VB152M16X40LL	16 × 40	0.021	0.053	2,540
	1,500	LXV50VB152M18X30LL	18 × 30	0.026	0.065	2,200
	1,800	LXV50VB182M18X35LL	18 × 35	0.023	0.058	2,400
	2,200	LXV50VB222M18X40LL	18 × 40	0.02	0.05	2,610
<b>63 Volts</b> 79 Volts Surge	12	LXV63VB12RM5X11LL	5 × 11.5	1.9	4.8	100
	27	LXV63VB27RM6X11LL	6.3 × 11.5	1.1	2.8	160
	39	LXV63VB39RM6X15LL	6.3 × 15	0.62	1.6	230
	47	LXV63VB47RM8X12LL	8 × 12	0.49	1.3	275
	56	LXV63VB56RM10X12LL	10 × 12.5	0.27	0.68	420
	68	LXV63VB68RM8X15LL	8 × 15	0.34	0.85	360
	68	LXV63VB68RM10X16LL	10 × 16	0.21	0.53	523
	82	LXV63VB82RM8X20LL	8 × 20	0.21	0.53	500
	120	LXV63VB121M10X20LL	10 × 20	0.16	0.4	650
	150	LXV63VB151M10X25LL	10 × 25	0.13	0.33	780
	180	LXV63VB181M10X30LL	10 × 30	0.1	0.25	960
	220	LXV63VB221M12X20LL	12.5 × 20	0.11	0.28	870
	270	LXV63VB271M12X25LL	12.5 × 25	0.074	0.19	1,150
	390	LXV63VB391M12X30LL	12.5 × 30	0.068	0.17	1,280
	390	LXV63VB391M16X20LL	16 × 20	0.085	0.22	1,100
	470	LXV63VB471M12X35LL	12.5 × 35	0.063	0.16	1,390
	470	LXV63VB471M16X25LL	16 × 25	0.055	0.14	1,480
	560	LXV63VB561M12X40LL	12.5 × 40	0.051	0.13	1,530
	560	LXV63VB561M18X20LL	18 × 20	0.085	0.22	1,170
	680	LXV63VB681M16X30LL	16 × 30	0.046	0.12	1,720
	680	LXV63VB681M18X25LL	18 × 25	0.055	0.14	1,520
	820	LXV63VB821M16X35LL	16 × 35	0.04	0.1	1,910
	820	LXV63VB821M18X30LL	18 × 30	0.046	0.12	1,770
	1,000	LXV63VB102M16X40LL	16 × 40	0.036	0.09	2,070
	1,000	LXV63VB102M18X35LL	18 × 35	0.04	0.1	1,970
	1,200	LXV63VB122M18X40LL	18 × 40	0.036	0.09	2,130
<b>80 Volts</b> 100 Volts Surge	8.2	LXV80VB8R2M5X11LL	5 × 11.5	1.9	5.1	100
	18	LXV80VB18RM6X11LL	6.3 × 11.5	1.1	3.0	150
	27	LXV80VB27RM6X15LL	6.3 × 15	0.62	1.7	220
	33	LXV80VB33RM8X12LL	8 × 12	0.53	1.5	275
	39	LXV80VB39RM10X12LL	10 × 12.5	0.47	1.3	380
	47	LXV80VB47RM8X15LL	8 × 15	0.35	0.97	360

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

# LXV Series

## Standard Voltage Ratings - VB/Radial Lead

Rated Voltage (WVDC)	Capacitance ( $\mu\text{F}$ )	Catalog Part Number	Nominal Case Size* D × L (mm)	Maximum Impedance ( $\Omega$ ) at		Maximum Ripple Current (mA rms) at +105°C, 100kHz
				+20°C, 100kHz	-10°C, 100kHz	
<b>80 Volts 100 Volts Surge</b>	56	LXV80VB56RM8X20LL	8 × 20	0.27	0.74	490
	56	LXV80VB56RM10X16LL	10 × 16	0.33	0.90	500
	82	LXV80VB82RM10X20LL	10 × 20	0.26	0.70	620
	100	LXV80VB101M10X25LL	10 × 25	0.19	0.52	795
	150	LXV80VB151M10X30LL	10 × 30	0.15	0.41	955
	150	LXV80VB151M12X20LL	12.5 × 20	0.15	0.41	890
	180	LXV80VB181M12X25LL	12.5 × 25	0.11	0.30	1,040
	270	LXV80VB271M12X30LL	12.5 × 30	0.094	0.26	1,270
	270	LXV80VB271M16X20LL	16 × 20	0.11	0.30	1,240
	330	LXV80VB331M12X35LL	12.5 × 35	0.087	0.24	1,450
	390	LXV80VB391M12X40LL	12.5 × 40	0.060	0.17	1,610
	390	LXV80VB391M18X20LL	18 × 20	0.085	0.23	1,450
	470	LXV80VB471M16X30LL	16 × 30	0.058	0.16	1,790
	470	LXV80VB471M18X25LL	18 × 25	0.070	0.19	1,650
	560	LXV80VB561M16X35LL	16 × 35	0.052	0.14	2,000
	680	LXV80VB681M16X40LL	16 × 40	0.041	0.11	2,200
	680	LXV80VB681M18X30LL	18 × 30	0.058	0.16	1,850
	820	LXV80VB821M18X35LL	18 × 35	0.052	0.14	1,990
	1,000	LXV80VB102M18X40LL	18 × 40	0.041	0.11	2,370
<b>100 Volts 125 Volts Surge</b>	5.6	LXV100VB5R6M5X11LL	5 × 11.5	1.9	5.1	100
	12	LXV100VB12RM6X11LL	6.3 × 11.5	1.1	3.0	150
	18	LXV100VB18RM6X15LL	6.3 × 15	0.62	1.7	220
	22	LXV100VB22RM8X12LL	8 × 12	0.53	1.5	275
	27	LXV100VB27RM10X12LL	10 × 12.5	0.47	1.3	380
	33	LXV100VB33RM8X15LL	8 × 15	0.35	0.97	360
	33	LXV100VB33RM10X16LL	10 × 16	0.33	0.90	500
	39	LXV100VB39RM8X20LL	8 × 20	0.27	0.74	490
	56	LXV100VB56RM10X20LL	10 × 20	0.26	0.70	620
	68	LXV100VB68RM10X25LL	10 × 25	0.19	0.52	795
	100	LXV100VB101M10X30LL	10 × 30	0.15	0.41	955
	100	LXV100VB101M12X20LL	12.5 × 20	0.15	0.41	890
	120	LXV100VB121M12X25LL	12.5 × 25	0.11	0.30	1,040
	180	LXV100VB181M12X30LL	12.5 × 30	0.094	0.26	1,270
	180	LXV100VB181M16X20LL	16 × 20	0.11	0.30	1,240
	220	LXV100VB221M12X35LL	12.5 × 35	0.087	0.24	1,450
	220	LXV100VB221M16X25LL	16 × 25	0.081	0.22	1,440
	270	LXV100VB271M12X40LL	12.5 × 40	0.060	0.17	1,610
	270	LXV100VB271M18X20LL	18 × 20	0.085	0.23	1,450
	330	LXV100VB331M16X30LL	16 × 30	0.058	0.16	1,790
	330	LXV100VB331M18X25LL	18 × 25	0.070	0.19	1,650
	390	LXV100VB391M16X35LL	16 × 35	0.052	0.14	2,000
	390	LXV100VB391M18X30LL	18 × 30	0.058	0.16	1,850
	470	LXV100VB471M16X40LL	16 × 40	0.041	0.11	2,200
	560	LXV100VB561M18X35LL	18 × 35	0.052	0.14	1,990
	680	LXV100VB681M18X40LL	18 × 40	0.041	0.11	2,370

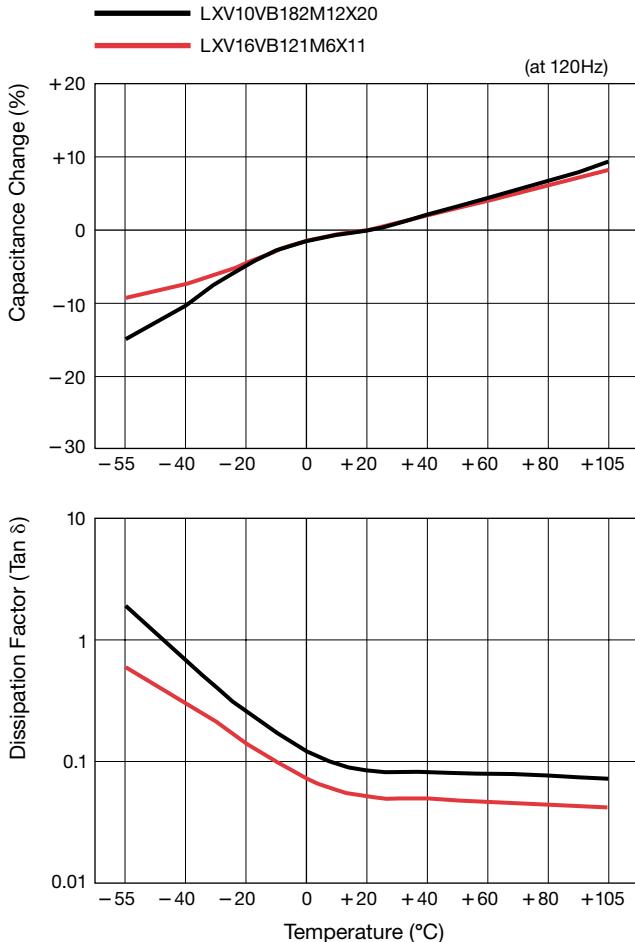
\*The case sizes in table are with no sleeve, refer to diagram for case sizes with sleeve.

Note: The products with case sizes 5×15, 12.5×15, 16×15 and 18×15 mm are available upon request as special order items.

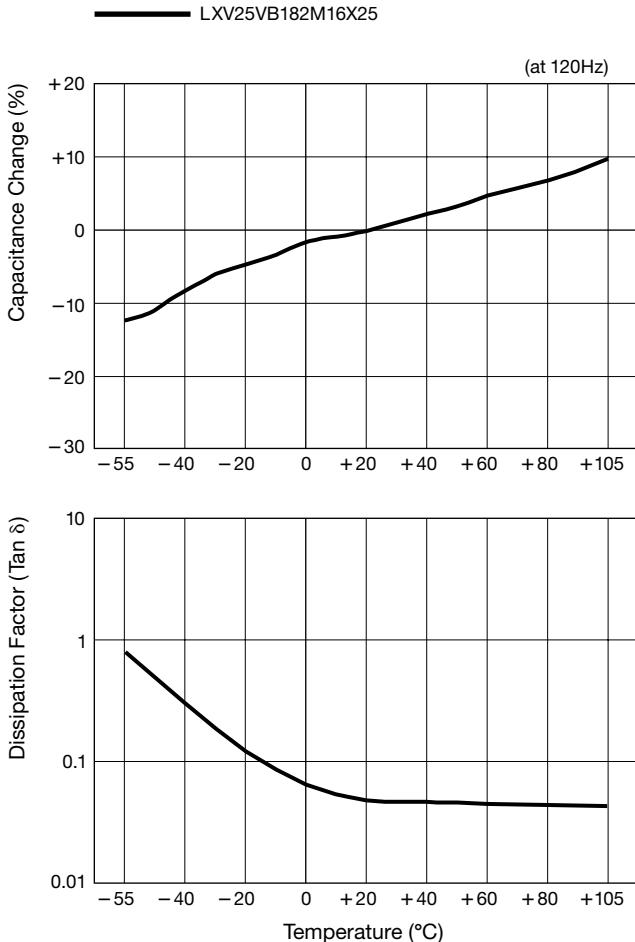
**LXV**  
**MINIATURE -105°C**

# LXV Series

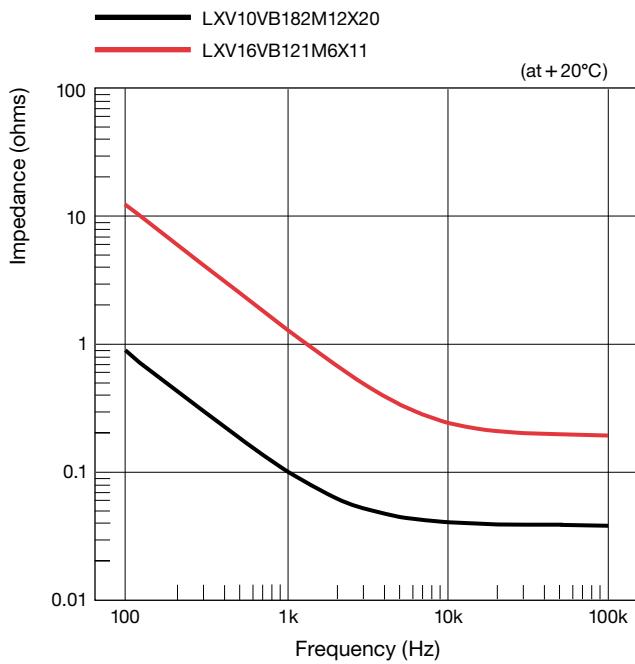
## Temperature Characteristics



## Temperature Characteristics



## Impedance – Frequency Characteristics



## Impedance – Frequency Characteristics

