

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size



Type 381LQ is on average 23% smaller and more than 5 mm shorter than Type 381LX. This is achieved with a new can closure method that permits installing capacitor elements into smaller cans. Approaching the robust capability of the 381L the new 381LQ enables you to shrink equipment size and retain the original performance.

### Highlights

- More capacitance per case
- Compares to the 381L

### Specifications

Temperature Range	-40 °C to + 105 °C ≤ 315 Vdc -25 °C to + 105 °C ≥ 350 Vdc																															
Rated Voltage Range	10 Vdc to 450 Vdc																															
Capacitance Range	100 µF to 100,000 µF																															
Capacitance Tolerance	± 20%																															
Leakage Current	≤ 3 √CV µA, 4 mA max, 5 minutes																															
Ripple Current Multipliers	<p>Ambient Temperature</p> <table border="1"> <thead> <tr> <th>45 °C</th> <th>60 °C</th> <th>70 °C</th> <th>85 °C</th> <th>105 °C</th> </tr> </thead> <tbody> <tr> <td>2.35</td> <td>2.20</td> <td>2.00</td> <td>1.70</td> <td>1.00</td> </tr> </tbody> </table> <p>Frequency</p> <table border="1"> <thead> <tr> <th>Voltage</th> <th>50 Hz</th> <th>60 Hz</th> <th>120 Hz</th> <th>500 kHz</th> <th>1 kHz</th> <th>10 kHz &amp; Up</th> </tr> </thead> <tbody> <tr> <td>10 - 100 WV</td> <td>0.93</td> <td>0.95</td> <td>1.00</td> <td>1.05</td> <td>1.08</td> <td>1.15</td> </tr> <tr> <td>160 - 450 WV</td> <td>0.75</td> <td>0.80</td> <td>1.00</td> <td>1.20</td> <td>1.25</td> <td>1.40</td> </tr> </tbody> </table>	45 °C	60 °C	70 °C	85 °C	105 °C	2.35	2.20	2.00	1.70	1.00	Voltage	50 Hz	60 Hz	120 Hz	500 kHz	1 kHz	10 kHz & Up	10 - 100 WV	0.93	0.95	1.00	1.05	1.08	1.15	160 - 450 WV	0.75	0.80	1.00	1.20	1.25	1.40
45 °C	60 °C	70 °C	85 °C	105 °C																												
2.35	2.20	2.00	1.70	1.00																												
Voltage	50 Hz	60 Hz	120 Hz	500 kHz	1 kHz	10 kHz & Up																										
10 - 100 WV	0.93	0.95	1.00	1.05	1.08	1.15																										
160 - 450 WV	0.75	0.80	1.00	1.20	1.25	1.40																										
Low Temperature Characteristics	Impedance ratio: $Z_{-20^{\circ}\text{C}}/Z_{+25^{\circ}\text{C}}$ ≤ 10 (10 Vdc) ≤ 8 (16–50 Vdc) ≤ 4 (63–100 Vdc) ≤ 3 (150–450 Vdc)																															
Endurance Life Test	2000 h at full load at 105 °C Δ Capacitance ±20% ESR 200% of limit DCL 100% of limit																															
Shelf Life Test	1000 h at 105 °C Δ Capacitance ±20% ESR 200% of limit DCL 100% of limit																															
Vibration	10 to 55 Hz, 0.06" and 10 g max, 2 h each plane																															
<a href="#">RoHS Compliant</a>																																

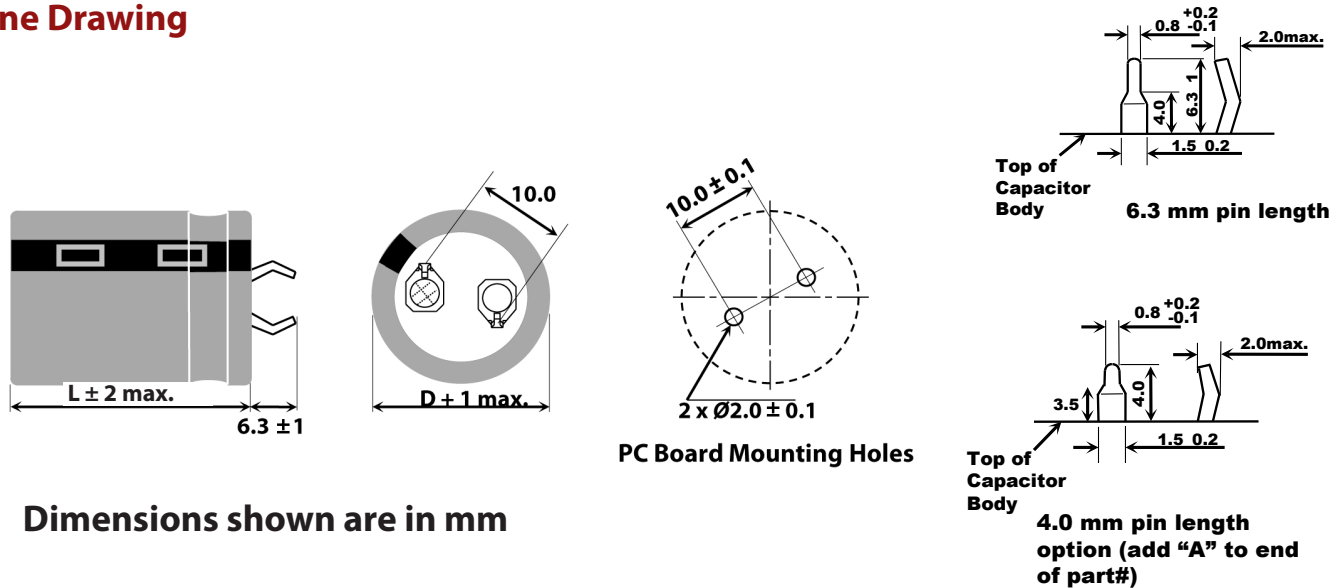
# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

### Part Numbering System

<b>381LQ</b>	<b>821</b>	<b>M</b>	<b>160</b>	<b>J04</b>	<b>2</b>	<b>A</b>
<b>Type</b>	<b>Cap</b>	<b>Tolerance</b>	<b>Voltage</b>	<b>Case Code</b>	<b>Insulating Sleeve</b>	<b>Pin Style</b>
<b>381LQ</b>	<b>821 = 820 μF</b> <b>332 = 3300 μF</b> <b>103 = 10,000 μF</b>	<b>M = ±20%</b>	<b>160 = 160 Vdc</b> <b>450 = 450 Vdc</b>		<b>2 = PVC</b>	<b>Blank = 2 pins</b> snap-in 6.3 mm L <b>A = 2 pins snap-in</b> 4.0 mm L

### Outline Drawing



Dimensions shown are in mm

### Insulated Case Dimensions

Case Code	DIAMETER		LENGTH		Typical
	mm	inches	mm	inches	Weight (grams)
H01	22	0.87	25	0.98	16
H02	22	0.87	30	1.18	19
H03	22	0.87	35	1.38	22
H04	22	0.87	40	1.57	24
H45	22	0.87	45	1.77	28
H05	22	0.87	50	1.97	31
J01	25	0.98	25	0.98	20
J02	25	0.98	30	1.18	24
J03	25	0.98	35	1.38	27
J04	25	0.98	40	1.57	31
J45	25	0.98	45	1.77	35
J05	25	0.98	50	1.97	38

Case Code	DIAMETER		LENGTH		Typical
	mm	inches	mm	inches	Weight (grams)
K01	30	1.18	25	0.98	30
K02	30	1.18	30	1.18	35
K03	30	1.18	35	1.38	40
K04	30	1.18	40	1.57	44
K45	30	1.18	45	1.77	49
K05	30	1.18	50	1.97	53
A01	35	1.38	25	0.98	42
A02	35	1.38	30	1.18	48
A03	35	1.38	35	1.38	54
A04	35	1.38	40	1.57	60
A45	35	1.38	45	1.77	67
A05	35	1.38	50	1.97	74

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

### Ratings

Cap. (uF)	Catalog Part Number	Max. ESR @ +25°C		Ripple Amps @ +105°C		Nominal Size D x L (mm)
		120 Hz	20 kHz	120 Hz	20 kHz	
		(ohms)	(ohms)	(A)	(A)	
<b>10 Vdc (13 Vdc Surge)</b>						
12000	381LQ123M010H012	0.076	0.065	2.20	2.53	22 x 25
18000	381LQ183M010H022	0.051	0.043	2.40	2.76	22 x 30
22000	381LQ223M010H032	0.041	0.035	2.60	2.99	22 x 35
27000	381LQ273M010J032	0.034	0.029	3.10	3.57	25 x 35
33000	381LQ333M010J042	0.028	0.023	3.40	3.91	25 x 40
39000	381LQ393M010K032	0.026	0.022	3.70	4.26	30 x 35
47000	381LQ473M010K032	0.024	0.022	4.20	4.83	30 x 35
56000	381LQ563M010K042	0.023	0.021	5.00	5.75	30 x 40
68000	381LQ683M010K452	0.022	0.020	5.40	6.21	30 x 45
82000	381LQ823M010A452	0.021	0.019	6.10	7.02	35 x 45
100000	381LQ104M010A052	0.020	0.019	6.90	7.94	35 x 50
<b>16 Vdc (20 Vdc Surge)</b>						
10000	381LQ103M016H012	0.075	0.063	2.60	2.99	22 x 25
12000	381LQ123M016H022	0.062	0.053	2.90	3.34	22 x 30
15000	381LQ153M016H032	0.050	0.042	3.20	3.68	22 x 35
18000	381LQ183M016H032	0.041	0.035	3.50	4.03	22 x 35
22000	381LQ223M016H042	0.034	0.029	3.80	4.37	22 x 40
27000	381LQ273M016H052	0.028	0.023	4.20	4.83	22 x 50
27000	381LQ273M016K022	0.028	0.023	4.20	4.83	30 x 30
33000	381LQ333M016K032	0.023	0.019	4.70	5.41	30 x 35
39000	381LQ393M016K042	0.022	0.018	5.10	5.87	30 x 40
47000	381LQ473M016K452	0.016	0.014	5.50	6.33	30 x 45
56000	381LQ563M016A452	0.020	0.018	6.00	6.90	35 x 45
<b>25 Vdc (32 Vdc Surge)</b>						
6800	381LQ682M025H022	0.085	0.064	2.40	2.76	22 x 30
8200	381LQ822M025H022	0.071	0.053	2.70	3.11	22 x 30
10000	381LQ103M025J022	0.058	0.044	3.00	3.45	25 x 30
12000	381LQ123M025J022	0.048	0.036	3.20	3.68	25 x 30
15000	381LQ153M025J032	0.039	0.029	3.60	4.14	25 x 35
18000	381LQ183M025J042	0.032	0.024	3.90	4.49	25 x 40
22000	381LQ223M025J452	0.026	0.020	4.30	4.95	25 x 45
27000	381LQ273M025K042	0.021	0.016	4.80	5.52	30 x 40
33000	381LQ333M025K452	0.018	0.013	5.50	6.33	30 x 45
39000	381LQ393M025A452	0.017	0.014	5.80	6.67	35 x 45
47000	381LQ473M025A052	0.017	0.014	6.30	7.25	35 x 50
<b>35 Vdc (44 Vdc Surge)</b>						
4700	381LQ472M035H012	0.106	0.079	2.20	2.53	22 x 25
5600	381LQ562M035H022	0.089	0.067	2.40	2.76	22 x 30
5600	381LQ562M035J012	0.089	0.067	2.40	2.76	25 x 25
6800	381LQ682M035J022	0.073	0.055	2.60	2.99	25 x 30
8200	381LQ822M035J022	0.061	0.045	2.90	3.34	25 x 30
10000	381LQ103M035J032	0.050	0.037	3.20	3.68	25 x 35

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

Cap. (uF)	Catalog Part Number	Max. ESR @ +25°C		Ripple Amps @ +105°C		Nominal Size D x L (mm)
		120 Hz	20 kHz	120 Hz	20 kHz	
		(ohms)	(ohms)	(A)	(A)	
12000	381LQ123M035J042	0.041	0.031	3.50	4.03	25 x 40
15000	381LQ153M035K042	0.033	0.025	3.90	4.49	30 x 40
18000	381LQ183M035K452	0.028	0.021	4.30	4.95	30 x 45
22000	381LQ223M035K452	0.023	0.017	5.00	5.75	30 x 45
27000	381LQ273M035A052	0.018	0.014	5.30	6.10	35 x 50
33000	381LQ333M035A052	0.015	0.012	5.90	6.79	35 x 50
<b>50 Vdc (63 Vdc Surge)</b>						
2700	381LQ272M050H012	0.154	0.115	1.80	2.07	22 x 25
3300	381LQ332M050H012	0.126	0.094	2.00	2.30	22 x 25
3900	381LQ392M050J012	0.106	0.080	2.20	2.53	25 x 25
4700	381LQ472M050H032	0.088	0.066	2.50	2.88	22 x 35
5600	381LQ562M050J032	0.074	0.056	2.80	3.22	25 x 35
6800	381LQ682M050H452	0.061	0.046	3.30	3.80	22 x 45
8200	381LQ822M050A032	0.051	0.038	3.60	4.14	35 x 35
10000	381LQ103M050J052	0.041	0.031	4.00	4.60	25 x 50
12000	381LQ123M050K452	0.035	0.026	4.50	5.18	30 x 45
15000	381LQ153M050K452	0.028	0.021	4.80	5.52	30 x 45
18000	381LQ183M050A452	0.023	0.018	5.60	6.44	35 x 45
<b>63 Vdc (79 Vdc Surge)</b>						
2200	381LQ222M063H022	0.151	0.113	2.00	2.30	22 x 30
2700	381LQ272M063H042	0.123	0.092	2.20	2.53	22 x 40
3300	381LQ332M063H042	0.100	0.075	2.50	2.88	22 x 40
3900	381LQ392M063J022	0.085	0.064	2.70	3.11	25 x 30
4700	381LQ472M063J032	0.071	0.053	3.00	3.45	25 x 35
5600	381LQ562M063K022	0.059	0.044	3.30	3.80	30 x 30
6800	381LQ682M063K042	0.049	0.037	3.60	4.14	30 x 40
8200	381LQ822M063A032	0.040	0.030	3.90	4.49	35 x 35
10000	381LQ103M063K452	0.033	0.025	4.40	5.06	30 x 45
12000	381LQ123M063K052	0.028	0.021	4.80	5.52	30 x 50
<b>80 Vdc (100 Vdc Surge)</b>						
1200	381LQ122M080H022	0.235	0.176	1.50	1.73	22 x 30
1500	381LQ152M080H022	0.188	0.141	1.70	1.96	22 x 30
1800	381LQ182M080H032	0.157	0.117	1.80	2.07	22 x 35
2200	381LQ222M080H042	0.128	0.096	2.10	2.42	22 x 40
2700	381LQ272M080J042	0.104	0.078	2.40	2.76	25 x 40
3300	381LQ332M080J042	0.085	0.064	2.60	2.99	25 x 40
3900	381LQ392M080K042	0.072	0.054	3.00	3.45	30 x 40
4700	381LQ472M080K042	0.060	0.045	3.30	3.80	30 x 40
5600	381LQ562M080K452	0.050	0.038	3.70	4.26	30 x 45
6800	381LQ682M080K052	0.041	0.031	3.90	4.49	30 x 50
8200	381LQ822M080A452	0.034	0.027	4.50	5.18	35 x 45

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

Cap. (uF)	Catalog Part Number	Max. ESR @ +25°C		Ripple Amps @ +105°C		Nominal Size D x L (mm)
		120 Hz	20 kHz	120 Hz	20 kHz	
		(ohms)	(ohms)	(A)	(A)	
<b>100 Vdc (125 Vdc Surge)</b>						
820	381LQ821M100H022	0.303	0.197	1.40	1.61	22 x 30
1200	381LQ122M100H022	0.207	0.135	1.80	2.07	22 x 30
1500	381LQ152M100K012	0.166	0.108	2.10	2.42	30 x 25
1800	381LQ182M100H042	0.138	0.090	2.30	2.65	22 x 40
2200	381LQ222M100J452	0.113	0.073	2.60	2.99	25 x 45
2700	381LQ272M100A022	0.092	0.060	2.90	3.34	35 x 30
3300	381LQ332M100A022	0.075	0.049	3.20	3.68	35 x 30
3900	381LQ392M100K052	0.064	0.043	3.60	4.14	30 x 50
4700	381LQ472M100K052	0.053	0.038	3.80	4.37	30 x 50
5600	381LQ562M100A052	0.044	0.031	4.20	4.83	35 x 50
6800	381LQ682M100A052	0.037	0.027	4.70	5.41	35 x 50
<b>160 Vdc (200 Vdc Surge)</b>						
470	381LQ471M160H022	0.423	0.190	1.40	1.96	22 x 30
560	381LQ561M160H042	0.355	0.160	1.50	2.10	22 x 40
680	381LQ681M160H042	0.293	0.132	1.70	2.38	22 x 40
820	381LQ821M160J042	0.243	0.109	2.00	2.80	25 x 40
1000	381LQ102M160J042	0.199	0.090	2.20	3.08	25 x 40
1200	381LQ122M160K032	0.166	0.075	2.30	3.22	30 x 35
1500	381LQ152M160K452	0.133	0.060	2.50	3.50	30 x 45
1800	381LQ182M160K452	0.110	0.055	2.70	3.78	30 x 45
2200	381LQ222M160K052	0.090	0.045	2.90	4.06	30 x 50
2700	381LQ272M160A052	0.080	0.040	3.10	4.34	35 x 50
3300	381LQ332M160A052	0.070	0.042	3.30	4.62	35 x 50
<b>180 Vdc (225 Vdc Surge)</b>						
560	381LQ561M180H042	0.355	0.160	1.50	2.10	22 x 40
680	381LQ681M180J032	0.293	0.132	1.70	2.38	25 x 35
820	381LQ821M180J042	0.243	0.109	2.00	2.80	25 x 40
1000	381LQ102M180J052	0.199	0.090	2.20	3.08	25 x 50
1200	381LQ122M180J052	0.166	0.075	3.31	4.63	25 x 50
1500	381LQ152M180K052	0.133	0.060	2.50	3.50	30 x 50
1800	381LQ182M180K052	0.110	0.050	2.70	3.78	30 x 50
2200	381LQ222M180A052	0.090	0.041	2.90	4.06	35 x 50
<b>200 Vdc (250 Vdc Surge)</b>						
390	381LQ391M200H022	0.510	0.230	1.31	1.83	22 x 30
470	381LQ471M200H022	0.423	0.190	1.45	2.03	22 x 30
560	381LQ561M200H042	0.355	0.160	1.67	2.34	22 x 40
680	381LQ681M200H042	0.293	0.132	1.75	2.45	22 x 40
680	381LQ681M200J032	0.293	0.132	1.75	2.45	25 x 35
820	381LQ821M200J042	0.243	0.109	1.99	2.79	25 x 40
1000	381LQ102M200J052	0.199	0.090	2.30	3.22	25 x 50
1000	381LQ102M200K022	0.199	0.090	2.30	3.22	30 x 30

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

Cap. (uF)	Catalog Part Number	Max. ESR		Ripple Amps		Nominal
		@ +25°C		@ +105°C		Size
		120 Hz (ohms)	20 kHz (ohms)	120 Hz (A)	20 kHz (A)	D x L (mm)
<b>200 Vdc (250 Vdc Surge)</b>						
1000	381LQ102M200K032	0.199	0.090	2.30	3.22	30 x 35
1200	381LQ122M200J052	0.166	0.075	2.65	3.71	25 x 50
1200	381LQ122M200K032	0.166	0.075	2.65	3.71	30 x 35
1500	381LQ152M200K042	0.133	0.060	2.80	3.92	30 x 40
1500	381LQ152M200K452	0.133	0.060	2.80	3.92	30 x 45
1500	381LQ152M200A042	0.133	0.084	2.80	3.92	35 x 40
1800	381LQ182M200K452	0.110	0.050	3.08	4.31	30 x 45
1800	381LQ182M200K052	0.111	0.050	3.08	4.31	30 x 50
1800	381LQ182M200A042	0.129	0.084	3.08	4.31	35 x 40
2200	381LQ222M200K052	0.090	0.041	3.48	4.87	30 x 50
2200	381LQ222M200A452	0.096	0.044	3.48	4.87	35 x 45
2200	381LQ222M200A052	0.096	0.044	3.48	4.87	35 x 50
<b>250 Vdc (300 Vdc Surge)</b>						
270	381LQ271M250H022	0.737	0.331	1.10	1.54	22 x 30
330	381LQ331M250H022	0.502	0.226	1.20	1.68	22 x 30
390	381LQ391M250J032	0.510	0.229	1.30	1.82	25 x 35
470	381LQ471M250J032	0.353	0.159	1.30	1.82	25 x 35
560	381LQ561M250J032	0.296	0.133	1.50	2.10	25 x 35
680	381LQ681M250H052	0.244	0.110	1.70	2.38	22 x 50
680	381LQ681M250J452	0.244	0.110	1.70	2.38	25 x 45
680	381LQ681M250K022	0.244	0.110	1.70	2.38	30 x 30
820	381LQ821M250J452	0.202	0.091	2.00	2.80	25 x 45
820	381LQ821M250K032	0.202	0.091	2.00	2.80	30 x 35
1000	381LQ102M250K042	0.166	0.075	2.20	3.08	30 x 40
1000	381LQ102M250K052	0.166	0.075	2.20	3.08	30 x 50
1200	381LQ122M250K452	0.138	0.062	2.30	3.22	30 x 45
1200	381LQ122M250A032	0.138	0.062	2.30	3.22	35 x 35
1500	381LQ152M250A452	0.110	0.050	2.50	3.50	35 x 45
1800	381LQ182M250A452	0.092	0.041	2.50	3.50	35 x 45
1800	381LQ182M250A052	0.092	0.041	2.70	3.78	35 x 50
<b>315 Vdc (365 Vdc Surge)</b>						
150	381LQ151M315H022	1.330	0.600	0.82	1.15	22 x 30
180	381LQ181M315H022	1.110	0.500	0.86	1.20	22 x 30
220	381LQ221M315H032	0.900	0.410	0.98	1.37	22 x 35
270	381LQ271M315J032	0.740	0.330	1.10	1.54	25 x 35
330	381LQ331M315J042	0.600	0.270	1.20	1.68	25 x 40
390	381LQ391M315J042	0.510	0.230	1.30	1.82	25 x 40
390	381LQ391M315K022	0.425	0.191	1.30	1.82	30 x 30
470	381LQ471M315J452	0.420	0.190	1.40	1.96	25 x 45
470	381LQ471M315K032	0.353	0.159	1.40	1.96	30 x 35
560	381LQ561M315J052	0.360	0.160	1.50	2.10	25 x 50
560	381LQ561M315K042	0.296	0.133	1.50	2.10	30 x 40

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

Cap. (uF)	Catalog Part Number	Max. ESR @ +25°C		Ripple Amps @ +105°C		Nominal Size
		120 Hz	20 kHz	120 Hz	20 kHz	D x L
		(ohms)	(ohms)	(A)	(A)	(mm)
<b>315 Vdc (365 Vdc Surge)</b>						
680	381LQ681M315K452	0.244	0.116	1.70	2.38	30 x 45
680	381LQ681M315A032	0.244	0.116	1.70	2.38	35 x 35
820	381LQ821M315K052	0.202	0.091	2.00	2.80	30 x 50
820	381LQ821M315A042	0.202	0.091	2.00	2.80	35 x 40
1000	381LQ102M315A452	0.166	0.075	2.30	3.22	35 x 45
<b>350 Vdc (400 Vdc Surge)</b>						
120	381LQ121M350H022	1.660	0.750	0.75	1.05	22 x 30
150	381LQ151M350H022	1.330	0.600	0.77	1.08	22 x 30
180	381LQ181M350H022	1.110	0.500	0.87	1.22	22 x 30
220	381LQ221M350H032	0.900	0.450	1.44	2.02	22 x 35
270	381LQ271M350J032	0.740	0.330	1.10	1.54	25 x 35
330	381LQ331M350J042	0.600	0.270	1.20	1.68	25 x 40
390	381LQ391M350J452	0.510	0.230	1.30	1.82	25 x 45
470	381LQ471M350A022	0.420	0.190	1.40	1.96	35 x 30
560	381LQ561M350K452	0.296	0.133	1.50	2.10	30 x 45
560	381LQ561M350A032	0.296	0.133	1.50	2.10	35 x 35
680	381LQ681M350K052	0.244	0.110	1.70	2.38	30 x 50
680	381LQ681M350A042	0.244	0.110	1.70	2.38	35 x 40
820	381LQ821M350A452	0.202	0.091	1.90	2.66	35 x 45
<b>400 Vdc (450 Vdc Surge)</b>						
100	381LQ101M400H012	1.990	0.900	0.70	0.98	22 x 25
120	381LQ121M400H022	1.520	0.684	0.75	1.05	22 x 30
150	381LQ151M400H032	1.330	0.600	0.88	1.23	22 x 35
180	381LQ181M400J032	1.110	0.500	0.95	1.33	25 x 35
220	381LQ221M400H452	0.900	0.410	1.05	1.40	22 x 45
220	381LQ221M400J032	0.829	0.373	1.10	1.54	25 x 35
270	381LQ271M400K022	0.675	0.304	1.22	1.71	30 x 30
330	381LQ331M400K032	0.553	0.249	1.44	2.02	30 x 35
390	381LQ391M400J052	0.510	0.230	1.55	2.17	25 x 50
390	381LQ391M400K032	0.468	0.210	1.40	1.95	30 x 35
390	381LQ391M400K042	0.468	0.210	1.55	2.17	30 x 40
470	381LQ471M400K452	0.388	0.175	1.68	2.35	30 x 45
470	381LQ471M400A032	0.388	0.175	1.68	2.35	35 x 35
560	381LQ561M400K052	0.326	0.147	1.90	2.66	30 x 50
560	381LQ561M400A042	0.326	0.147	1.90	2.66	35 x 40
680	381LQ681M400A452	0.268	0.121	2.12	2.97	35 X 45
820	381LQ821M400A052	0.200	0.090	2.30	3.20	35 X 50
<b>420 Vdc (470 Vdc Surge)</b>						
120	381LQ121M420H022	1.660	0.750	0.70	0.98	22 x 30
150	381LQ151M420H042	1.330	0.600	0.85	1.20	22 x 40
180	381LQ181M420H042	1.100	0.460	0.90	1.30	22 x 40
220	381LQ221M420H452	0.900	0.400	1.05	1.50	22 x 45

# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

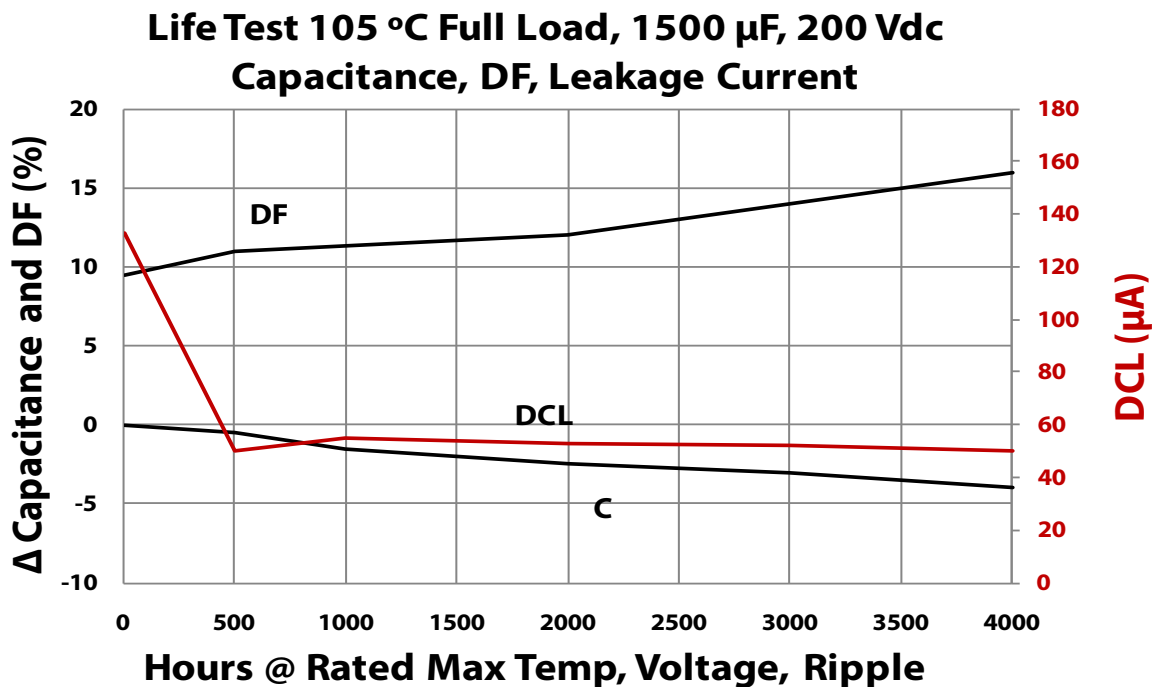
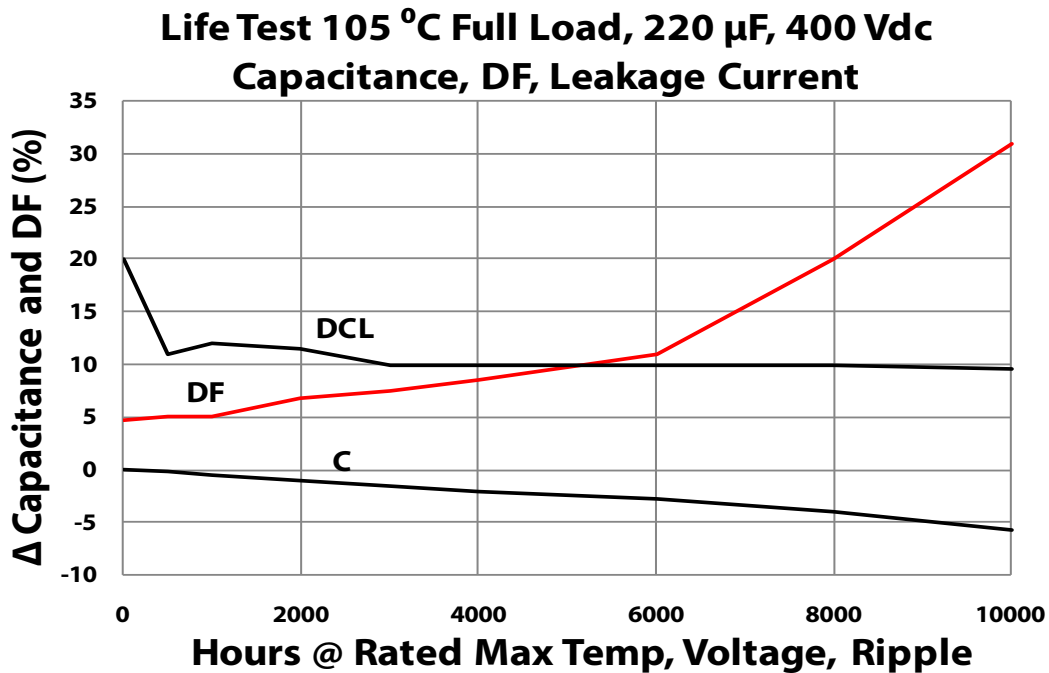
Cap. (uF)	Catalog Part Number	Max. ESR @ +25°C		Ripple Amps @ +105°C		Nominal Size
		120 Hz	20 kHz	120 Hz	20 kHz	D x L
		(ohms)	(ohms)	(A)	(A)	(mm)
<b>420 Vdc (470 Vdc Surge)</b>						
270	381LQ271M420K022	0.675	0.305	1.20	1.70	30 x 30
330	381LQ331M420K032	0.550	0.250	1.40	2.00	30 x 35
330	381LQ331M420A032	0.550	0.250	1.40	2.00	35 x 35
390	381LQ391M420K042	0.470	0.210	1.55	2.15	30 x 40
390	381LQ391M420A032	0.470	0.210	1.55	2.15	35 x 35
470	381LQ471M420K452	0.390	0.175	1.70	2.40	30 x 45
470	381LQ471M420A032	0.390	0.175	1.70	2.40	35 x 35
560	381LQ561M420K052	0.330	0.150	1.90	2.65	30 x 50
560	381LQ561M420A452	0.330	0.150	1.90	2.65	35 x 45
680	381LQ681M420A052	0.270	0.120	2.10	2.95	35 x 50
<b>450 Vdc (500 Vdc Surge)</b>						
100	381LQ101M450H022	1.820	0.820	0.65	0.90	22 x 30
120	381LQ121M450H032	1.659	0.746	0.70	1.00	22 x 35
150	381LQ151M450H032	1.327	0.594	0.80	1.10	22 x 35
150	381LQ151M450J022	1.216	0.547	0.79	1.11	25 x 30
180	381LQ181M450H042	1.106	0.498	1.00	1.43	22 x 40
180	381LQ181M450K022	1.013	0.456	0.87	1.22	30 X 30
220	381LQ221M450J452	0.905	0.317	1.12	1.52	25 x 45
220	381LQ221M450K022	0.829	0.373	1.00	1.40	30 X 30
270	381LQ271M450K032	0.675	0.304	1.10	1.50	30 X 35
270	381LQ271M450K042	0.675	0.304	1.19	1.67	30 X 40
330	381LQ331M450K042	0.553	0.249	1.25	1.75	30 X 40
330	381LQ331M450K452	0.553	0.249	1.38	1.93	30 X 45
330	381LQ331M450A032	0.553	0.249	1.38	1.93	35 X 35
390	381LQ391M450K452	0.468	0.210	1.40	1.95	30 X 45
390	381LQ391M450K052	0.680	0.210	1.55	2.17	30 X 50
390	381LQ391M450A042	0.468	0.210	1.55	2.17	35 X 40
470	381LQ471M450A452	0.388	0.175	1.74	2.44	35 X 45
560	381LQ561M450A052	0.326	0.147	1.90	2.66	35 X 50



# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

Higher Capacitance per Case Size

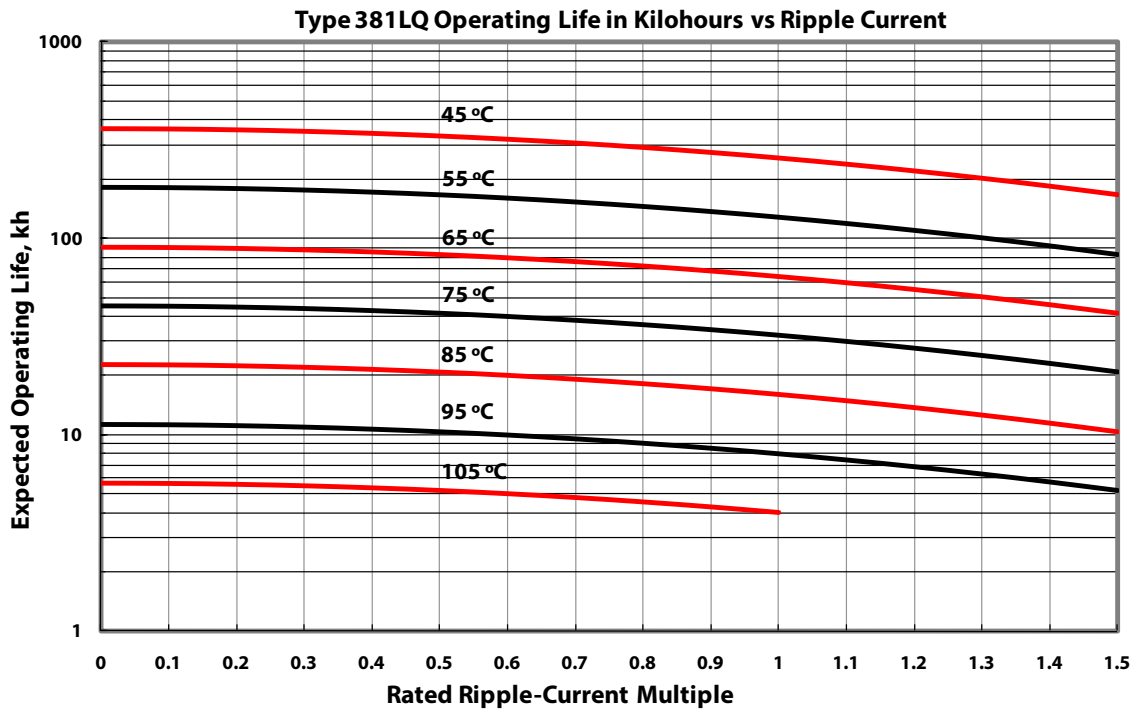
## Typical Performance Curves



# Type 381LQ 105 °C Compact, High Ripple, Snap-In Aluminum

## Higher Capacitance per Case Size

### Typical Performance Curves



**Notice and Disclaimer:** All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.