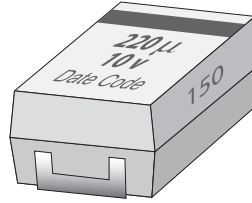


Low ESR



FEATURES

- **Lead-free, RoHS compliant**
- Very Low Equivalent Series Resistance (ESR), **Ideal for Power Supplies**
- High ripple and surge current capability
- Meets or exceeds EIA 535 BAAC and IECQ standards (QC300801/US0001, IS - 28)
- **Pre-conditioned, surge current tested for maximum robustness**
- Capacitance range: 1.0 μf to 1500 μf (higher values in development)
- Voltage range: 4 to 50 WVDC
- Low Profile sizes (see Low Profile LSR section)
- Operating temperature range -55°C to $+125^{\circ}\text{C}$, $2/3 \times V_r$ (linear derating) above $+85^{\circ}\text{C}$
- Precision molded case with flat surfaces for vacuum pick-up
- Laser marking and bold videcon - readable polarity stripe
- Compliant terminations
- Glue pad on underside for bonding to circuit board prior to soldering
- Encapsulant material satisfies the UL 94 VO flammability classification
- MSL (moisture sensitivity level) per IPC/Jedec J-STD-020B is level 1

Nemco LSR (Low Equivalent Series Resistance) surface mount tantalum capacitors are specifically designed for those applications such as **POWER SUPPLIES** requiring the highest level of robustness available to tantalum capacitor technology. These devices have inherently **low ESR** due to special manufacturing process and powder technology improvements. They are capable of handling higher ripple currents than standard product. The benefits of using Nemco LSR Series components are its capability to handle higher ripple currents producing lower ripple voltage output and less power dissipation resulting in less heating.

After manufacturing, parts are conditioned by being subjected to an elevated temperature overvoltage burn-in, applied for a minimum of 2 hours. Parts are monitored on a 100% basis for DCL at elevated temperatures. Parts are then subjected to a low impedance surge current. Surge current testing is performed on a 100% basis. Each capacitor is individually monitored. All devices undergo 100% test for capacitance, dissipation factor, DCL, and ESR at 100 kHz to LSR requirements.



Lead Free



RoHS
compliant

PART NUMBERS & SPECIFICATIONS

Capacitance μF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL μA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

4 V DC @ 85°C

47.0	A	500	LSR47 / 4A _ 500	1.9	8	387	348	155
100.0	B	200	LSR100 / 4B _ 200	4.0	8	652	587	261
100.0	B	250	LSR100 / 4B _ 250	4.0	8	583	525	233
100.0	B	350	LSR100 / 4B _ 350	4.0	8	493	444	197
100.0	B	500	LSR100 / 4B _ 500	4.0	8	412	371	165
150.0	B	250	LSR220 / 4B _ 250	6.0	10	583	525	233
150.0	C	70	LSR150 / 4C _ 70	6.0	6	1254	1128	501
150.0	C	80	LSR150 / 4C _ 80	6.0	6	1173	1055	469
220.0	D	40	LSR220 / 4D _ 40	8.8	8	1936	1743	775
220.0	D	50	LSR220 / 4D _ 50	8.8	8	1732	1559	693
220.0	D	100	LSR220 / 4D _ 100	8.8	8	1225	1102	490
330.0	C	100	LSR330 / 4C _ 100	13.2	8	1049	944	420
330.0	D	25	LSR330 / 4D _ 25	13.2	8	3194	2874	1277
330.0	D	35	LSR330 / 4D _ 35	13.2	8	2699	2429	1080
330.0	D	45	LSR330 / 4D _ 45	13.2	8	1826	1643	730
330.0	D	100	LSR330 / 4D _ 100	13.2	8	1225	1102	490
470.0	D	25	LSR470 / 4D _ 25	18.8	8	3194	2874	1277
470.0	D	35	LSR470 / 4D _ 35	18.8	8	2699	2429	1080
470.0	D	45	LSR470 / 4D _ 45	18.8	12	1826	1643	730
470.0	D	100	LSR470 / 4D _ 100	18.8	12	1225	1102	490
470.0	H	35	LSR470 / 4H _ 35	18.8	10	2171	1954	868
470.0	H	45	LSR470 / 4H _ 45	18.8	12	1915	1723	766
470.0	H	100	LSR470 / 4H _ 100	18.8	12	1285	1156	514
680.0	D	25	LSR680 / 4D _ 25	27.2	8	3194	2874	1277
680.0	D	45	LSR680 / 4D _ 45	27.2	14	1915	1643	730
680.0	D	60	LSR680 / 4D _ 60	27.2	14	1581	1423	632
680.0	D	100	LSR680 / 4D _ 100	27.2	14	1225	1102	490
680.0	H	18	LSR680 / 4H _ 18	27.2	6	3873	3486	1549
680.0	H	23	LSR680 / 4H _ 23	27.2	6	3426	3084	1370
680.0	H	40	LSR680 / 4H _ 40	27.2	14	2031	1828	812
680.0	H	60	LSR680 / 4H _ 60	27.2	14	1658	1492	663
680.0	H	100	LSR680 / 4H _ 100	27.2	14	1284	1156	513
1000.0	D	25	LSR1000/ 4D _ 25	40.0	8	3194	2874	1277
1000.0	D	45	LSR1000/ 4D _ 45	40.0	8	2380	2142	952
1000.0	H	18	LSR1000/ 4H _ 18	40.0	6	3873	3486	1549
1000.0	H	23	LSR1000/ 4H _ 23	40.0	6	3426	3084	1370
1000.0	H	40	LSR1000/ 4H _ 40	40.0	14	2031	1828	812
1000.0	H	60	LSR1000/ 4H _ 60	40.0	14	1658	1492	663
1000.0	Z	18	LSR1000/ 4Z _ 18	40.0	6	3979	3581	1592
1000.0	Z	25	LSR1000/ 4Z _ 25	40.0	16	3162	2846	1265
1000.0	Z	35	LSR1000/ 4Z _ 35	40.0	16	2673	2405	1069
1000.0	Z	40	LSR1000/ 4Z _ 40	40.0	16	2500	2250	1000
1000.0	Z	50	LSR1000/ 4Z _ 50	40.0	16	2236	2012	894
1500.0	H	15	LSR1500/ 4H _ 15	40.0	6	4243	3818	1697
1500.0	H	50	LSR1500/ 4H _ 50	60.0	30	1817	1635	727
1500.0	H	75	LSR1500/ 4H _ 75	60.0	30	1483	1335	593
1500.0	Z	50	LSR1500/ 4Z _ 50	60.0	30	2236	2012	894
1500.0	Z	75	LSR1500/ 4Z _ 75	60.0	30	1826	1643	730

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.

PART NUMBERS & SPECIFICATIONS

Capacitance μF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL μA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

6.3 V DC @ 85°C

6.8	A	1800	LSR6.8 / 6A _ 1800	0.5	6	204	184	82
10.0	A	1500	LSR10 / 6A _ 1500	0.6	6	224	200	89
15.0	A	700	LSR15 / 6A _ 700	0.9	6	327	295	131
15.0	A	1500	LSR15 / 6A _ 1500	0.9	6	224	200	89
22.0	A	500	LSR22 / 6A _ 500	1.4	6	387	349	155
22.0	A	900	LSR22 / 6A _ 900	1.4	6	289	260	115
22.0	B	375	LSR22 / 6B _ 375	1.4	6	476	428	190
22.0	B	600	LSR22 / 6B _ 600	1.4	6	376	339	151
33.0	A	600	LSR33 / 6A _ 600	2.1	6	353	318	141
33.0	B	250	LSR33 / 6B _ 250	2.1	6	583	525	233
33.0	B	350	LSR33 / 6B _ 350	2.1	6	493	444	197
33.0	B	450	LSR33 / 6B _ 450	2.1	6	435	391	174
33.0	B	600	LSR33 / 6B _ 600	2.1	6	376	338	151
47.0	A	800	LSR47 / 6A _ 800	2.8	10	306	276	122
47.0	B	250	LSR47 / 6B _ 250	3.0	6	583	525	233
47.0	B	350	LSR47 / 6B _ 350	3.0	6	493	444	197
47.0	B	500	LSR47 / 6B _ 500	3.0	6	412	371	165
47.0	C	300	LSR47 / 6C _ 300	3.0	6	606	545	242
68.0	B	250	LSR68 / 6B _ 250	4.3	8	583	525	233
68.0	B	350	LSR68 / 6B _ 350	4.3	8	493	444	197
68.0	B	500	LSR68 / 6B _ 500	4.3	6	412	371	165
68.0	C	150	LSR68 / 6C _ 150	4.3	6	856	771	343
68.0	C	200	LSR68 / 6C _ 200	4.3	6	742	667	297
100.0	B	250	LSR100 / 6B _ 250	6.3	10	583	525	233
100.0	B	400	LSR100 / 6B _ 400	6.3	10	461	415	184
100.0	C	75	LSR100 / 6C _ 75	6.3	6	1211	1091	484
100.0	C	150	LSR100 / 6C _ 150	6.3	6	856	771	343
150.0	C	50	LSR150 / 6C _ 50	9.5	6	1483	1335	593
150.0	C	90	LSR150 / 6C _ 90	9.5	6	1106	995	442
150.0	C	150	LSR150 / 6C _ 150	9.5	6	856	771	343
150.0	C	200	LSR150 / 6C _ 200	9.5	6	742	667	297
150.0	C	250	LSR150 / 6C _ 250	6.3	6	663	597	265
150.0	D	50	LSR150 / 6D _ 50	9.5	6	1732	1559	693
150.0	D	125	LSR150 / 6D _ 125	9.5	6	1095	986	438
220.0	C	70	LSR220 / 6C _ 70	13.9	8	1254	1128	501
220.0	C	100	LSR220 / 6C _ 100	13.9	10	1049	944	420
220.0	C	125	LSR220 / 6C _ 125	13.9	8	938	844	375
220.0	C	250	LSR220 / 6C _ 250	13.9	10	663	597	265
220.0	D	50	LSR220 / 6D _ 50	13.9	8	1732	1559	693
220.0	D	100	LSR220 / 6D _ 100	13.9	8	1125	1102	490
220.0	D	125	LSR220 / 6D _ 125	13.9	8	1095	986	438
220.0	H	100	LSR220 / 6H _ 100	13.2	8	1285	1156	514
330.0	D	25	LSR330 / 6D _ 25	19.8	8	3194	2874	1277
330.0	D	35	LSR330 / 6D _ 35	19.8	8	2699	2429	1080
330.0	D	45	LSR330 / 6D _ 45	20.8	8	1826	1643	730
330.0	D	50	LSR330 / 6D _ 50	20.8	8	1732	1559	693
330.0	D	70	LSR330 / 6D _ 70	20.8	8	1464	1317	586
330.0	D	100	LSR330 / 6D _ 100	20.8	8	1125	1102	490
330.0	H	50	LSR330 / 6H _ 50	20.8	8	1817	1635	727
330.0	H	100	LSR330 / 6H _ 100	20.8	8	1285	1156	514
330.0	H	125	LSR330 / 6H _ 125	20.8	8	1149	1034	460
330.0	H	150	LSR330 / 6H _ 150	20.8	8	1049	944	420
470.0	D	45	LSR470 / 6D _ 45	29.6	12	1826	1643	730
470.0	D	60	LSR470 / 6D _ 60	29.6	12	1581	1423	632
470.0	D	100	LSR470 / 6D _ 100	29.6	12	1225	1102	490
470.0	D	200	LSR470 / 6D _ 200	29.6	12	866	779	346
470.0	H	18	LSR470 / 6H _ 18	28.0	6	3873	3486	1549
470.0	H	23	LSR470 / 6H _ 23	28.0	6	3426	3084	1370
470.0	H	30	LSR470 / 6H _ 30	28.0	6	3000	2700	1200
470.0	H	45	LSR470 / 6H _ 45	29.6	10	1915	1723	766
470.0	H	50	LSR470 / 6H _ 50	29.6	10	1817	1635	727
470.0	H	60	LSR470 / 6H _ 60	29.6	10	1658	1492	663
470.0	H	100	LSR470 / 6H _ 100	29.6	10	1285	1156	514

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.

PART NUMBERS & SPECIFICATIONS

Capacitance µF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL µA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

6.3 V DC @ 85°C cont.

470.0	H	200	LSR470 / 6H _ 200	29.6	10	908	817	363
470.0	Z	40	LSR470 / 6Z _ 40	29.6	10	2500	2250	1000
470.0	Z	55	LSR470 / 6Z _ 55	29.6	10	2132	1919	853
470.0	Z	100	LSR470 / 6Z _ 100	29.6	10	1581	1423	632
680.0	H	18	LSR680 / 6H _ 18	41.0	6	3873	3486	1549
680.0	H	23	LSR680 / 6H _ 23	41.0	6	3426	3084	1370
680.0	H	45	LSR680 / 6H _ 45	42.8	10	1915	1723	766
680.0	H	60	LSR680 / 6H _ 60	42.8	10	1658	1492	663
680.0	H	100	LSR680 / 6H _ 100	42.8	10	1284	1156	514
680.0	Z	23	LSR680 / 6Z _ 23	41.0	6	3520	3168	1408
680.0	Z	35	LSR680 / 6Z _ 35	42.8	14	2673	2405	1069
680.0	Z	40	LSR680 / 6Z _ 40	42.8	10	2500	2250	1000
680.0	Z	50	LSR680 / 6Z _ 50	42.8	10	2236	2012	894
1000.0	Z	40	LSR1000/ 6Z _ 40	60.0	16	2500	2250	1000
1000.0	Z	50	LSR1000/ 6Z _ 50	60.0	16	2236	2012	894

10 V DC @ 85°C

2.2	A	1800	LSR2.2 / 10A _ 1800	0.5	6	204	184	82
4.7	A	1400	LSR4.7 / 10A _ 1400	0.5	6	231	208	93
6.8	A	1800	LSR6.8 / 10A _ 1800	0.7	6	204	184	82
10.0	A	900	LSR10 / 10A _ 900	1.0	6	289	260	115
10.0	A	1800	LSR10 / 10A _ 1800	1.0	6	204	183	82
15.0	A	1000	LSR15 / 10A _ 1000	1.5	6	274	246	110
15.0	B	450	LSR15 / 10B _ 450	1.5	6	435	391	174
15.0	B	600	LSR15 / 10B _ 600	1.5	6	376	339	151
22.0	B	400	LSR22 / 10B _ 400	2.2	6	461	415	184
22.0	B	500	LSR22 / 10B _ 500	2.2	6	412	371	165
22.0	B	700	LSR22 / 10B _ 700	2.2	6	348	312	139
22.0	C	300	LSR22 / 10C _ 300	2.2	6	606	545	242
33.0	A	700	LSR33 / 10A _ 700	3.3	8	327	295	131
33.0	B	250	LSR33 / 10B _ 250	3.3	6	583	525	233
33.0	B	425	LSR33 / 10B _ 425	3.3	6	447	402	179
33.0	B	500	LSR33 / 10B _ 500	3.3	6	412	371	165
33.0	B	650	LSR33 / 10B _ 650	3.3	6	362	325	145
33.0	C	150	LSR33 / 10C _ 150	3.3	6	856	771	343
33.0	C	375	LSR33 / 10C _ 375	3.3	6	542	484	217
33.0	C	500	LSR33 / 10C _ 500	3.3	6	469	422	188
47.0	B	250	LSR47 / 10B _ 250	4.7	8	583	525	233
47.0	B	350	LSR47 / 10B _ 350	4.7	8	493	444	197
47.0	B	500	LSR47 / 10B _ 500	4.7	8	412	371	165
47.0	B	650	LSR47 / 10B _ 650	4.7	8	362	325	145
47.0	C	200	LSR47 / 10C _ 200	4.7	6	742	667	297
47.0	C	350	LSR47 / 10C _ 350	4.7	6	561	505	224
47.0	D	100	LSR47 / 10D _ 100	4.7	6	1225	1102	490
68.0	B	600	LSR68 / 10B _ 600	6.8	8	376	339	151
68.0	C	80	LSR68 / 10C _ 80	6.8	6	1173	1055	469
68.0	C	100	LSR68 / 10C _ 100	6.8	6	1049	944	420
68.0	C	200	LSR68 / 10C _ 200	6.8	6	742	667	297
68.0	C	300	LSR68 / 10C _ 300	6.8	6	605	544	242
68.0	D	100	LSR68 / 10D _ 100	6.8	6	1225	1102	490
68.0	D	150	LSR68 / 10D _ 150	6.8	6	1000	900	400
100.0	B	400	LSR100 / 10B _ 400	10.0	8	461	415	184
100.0	C	75	LSR100 / 10C _ 75	10.0	8	1211	1090	484
100.0	C	100	LSR100 / 10C _ 100	10.0	8	1049	944	420
100.0	C	150	LSR100 / 10C _ 150	10.0	8	856	771	343
100.0	C	200	LSR100 / 10C _ 200	10.0	8	742	667	297
100.0	D	50	LSR100 / 10D _ 50	10.0	6	1732	1559	693
100.0	D	65	LSR100 / 10D _ 65	10.0	6	1519	1367	608
100.0	D	80	LSR100 / 10D _ 80	10.0	6	1369	1232	548
100.0	D	100	LSR100 / 10D _ 100	10.0	6	1225	1102	490
100.0	D	125	LSR100 / 10D _ 125	10.0	6	1095	986	438
100.0	D	150	LSR100 / 10D _ 150	10.0	6	1000	900	400

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.

PART NUMBERS & SPECIFICATIONS

Capacitance μF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL μA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

10 V DC @ 85°C cont.

100.0	H	125	LSR100 / 10H _ 125	10.0	6	1149	1034	460
150.0	D	50	LSR150 / 10D _ 50	15.0	6	1732	1559	693
150.0	D	85	LSR150 / 10D _ 85	15.0	8	1328	1195	531
150.0	D	100	LSR150 / 10D _ 100	15.0	6	1225	1102	490
150.0	H	100	LSR150 / 10H _ 100	15.0	8	1285	1156	514
220.0	D	35	LSR220 / 10D _ 35	22.0	8	2699	2429	1080
220.0	D	50	LSR220 / 10D _ 50	22.0	8	1732	1559	693
220.0	D	100	LSR220 / 10D _ 100	22.0	8	1225	1102	490
220.0	D	150	LSR220 / 10D _ 150	22.0	8	1000	900	400
220.0	H	50	LSR220 / 10H _ 50	22.0	8	1817	1635	727
220.0	H	60	LSR220 / 10H _ 60	22.0	8	1658	1492	663
220.0	H	70	LSR220 / 10H _ 70	22.0	8	1535	1382	614
220.0	H	100	LSR220 / 10H _ 100	22.0	8	1285	1156	514
220.0	H	125	LSR220 / 10H _ 125	22.0	8	1149	1034	460
220.0	H	150	LSR220 / 10H _ 150	22.0	8	1049	944	420
330.0	D	35	LSR330 / 10D _ 35	33.0	8	2699	2429	1080
330.0	D	50	LSR330 / 10D _ 50	33.0	8	1732	1559	693
330.0	D	65	LSR330 / 10D _ 65	33.0	8	1519	1367	608
330.0	D	100	LSR330 / 10D _ 100	33.0	8	1225	1102	490
330.0	D	150	LSR330 / 10D _ 150	33.0	8	1000	900	400
330.0	H	23	LSR330 / 10H _ 23	33.0	6	3426	3084	1370
330.0	H	35	LSR330 / 10H _ 35	33.0	6	2777	2500	1111
330.0	H	40	LSR330 / 10H _ 40	33.0	8	2031	1828	812
330.0	H	50	LSR330 / 10H _ 50	33.0	8	1817	1635	727
330.0	H	60	LSR330 / 10H _ 60	33.0	8	1658	1492	663
330.0	H	100	LSR330 / 10H _ 100	33.0	8	1285	1156	514
330.0	Z	40	LSR330 / 10Z _ 40	33.0	10	2500	1250	1000
330.0	Z	60	LSR330 / 10Z _ 60	33.0	10	2041	1837	816
330.0	Z	100	LSR330 / 10Z _ 100	33.0	10	1581	1423	632
470.0	H	23	LSR470 / 10H _ 23	47.0	6	3426	3084	1370
470.0	H	30	LSR470 / 10H _ 30	47.0	6	3000	2700	1200
470.0	H	45	LSR470 / 10H _ 45	47.0	10	1915	1723	766
470.0	H	50	LSR470 / 10H _ 50	47.0	10	1817	1635	727
470.0	H	60	LSR470 / 10H _ 60	47.0	10	1658	1492	663
470.0	H	100	LSR470 / 10H _ 100	47.0	10	1285	1156	514
470.0	H	200	LSR470 / 10H _ 200	47.0	10	908	817	363
470.0	Z	40	LSR470 / 10Z _ 40	47.0	10	2500	2250	1000
470.0	Z	60	LSR470 / 10Z _ 60	47.0	10	2041	1837	816
470.0	Z	100	LSR470 / 10Z _ 100	47.0	10	1581	1423	632

16 V DC @ 85°C

2.2	A	1800	LSR2.2 / 16A _1800	0.5	6	204	183	81
2.2	A	3500	LSR2.2 / 16A _3500	0.5	6	146	131	59
3.3	A	3500	LSR3.3 / 16A _3500	0.5	6	146	131	59
4.7	A	2000	LSR4.7 / 16A _2000	0.8	6	194	174	77
4.7	B	800	LSR4.7 / 16B _ 800	0.8	6	326	293	130
4.7	B	1500	LSR4.7 / 16B _1500	0.8	6	238	214	95
6.8	A	1500	LSR6.8 / 16A _1500	1.1	6	224	201	89
6.8	B	600	LSR6.8 / 16B _ 600	1.1	6	376	339	151
6.8	B	1200	LSR6.8 / 16B _1200	1.1	6	266	240	106
10.0	B	500	LSR10 / 16B _ 500	1.6	6	412	371	165
10.0	B	800	LSR10 / 16B _ 800	1.6	6	326	293	130
10.0	C	500	LSR10 / 16C _ 500	1.6	6	469	422	188
15.0	B	500	LSR15 / 16B _ 500	2.4	6	412	371	165
15.0	B	800	LSR15 / 16B _ 800	2.4	6	326	292	130
22.0	B	400	LSR22 / 16B _ 400	3.5	6	461	415	184
22.0	B	600	LSR22 / 16B _ 600	3.5	6	376	338	150
22.0	C	150	LSR22 / 16C _ 150	3.5	6	856	771	343
22.0	C	250	LSR22 / 16C _ 250	3.5	6	663	597	265
22.0	C	300	LSR22 / 16C _ 300	3.5	6	605	545	242
22.0	C	375	LSR22 / 16C _ 375	3.5	6	542	487	217

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.

PART NUMBERS & SPECIFICATIONS

Capacitance μF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL μA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

16 V DC @ 85°C cont.

33.0	B	350	LSR33 / 16B _ 350	5.3	8	493	444	197
33.0	B	500	LSR33 / 16B _ 500	5.3	8	412	371	165
33.0	C	100	LSR33 / 16C _ 100	5.3	6	1049	944	420
33.0	C	150	LSR33 / 16C _ 150	5.3	6	856	771	343
33.0	C	225	LSR33 / 16C _ 225	5.3	6	699	629	279
33.0	C	300	LSR33 / 16C _ 300	5.3	6	606	545	242
33.0	D	200	LSR33 / 16D _ 200	5.3	6	866	779	346
47.0	C	110	LSR47 / 16C _ 110	7.5	6	1000	900	400
47.0	C	350	LSR47 / 16C _ 350	7.5	6	561	505	224
47.0	D	80	LSR47 / 16D _ 80	7.5	6	1369	1232	548
47.0	D	100	LSR47 / 16D _ 100	7.5	6	1225	1103	490
47.0	D	150	LSR47 / 16D _ 150	7.5	6	1000	900	400
47.0	D	200	LSR47 / 16D _ 200	7.5	6	866	775	346
68.0	C	125	LSR68 / 16C _ 125	10.9	6	938	844	375
68.0	C	200	LSR68 / 16C _ 200	10.9	6	741	667	296
68.0	D	70	LSR68 / 16D _ 70	10.9	6	1464	1317	586
68.0	D	100	LSR68 / 16D _ 100	10.9	6	1225	1102	490
68.0	D	150	LSR68 / 16D _ 150	10.9	6	1000	900	400
100.0	C	200	LSR100 / 16C _ 200	16.0	6	742	667	297
100.0	D	60	LSR100 / 16D _ 60	16.0	6	1581	1423	632
100.0	D	100	LSR100 / 16D _ 100	16.0	6	1225	1102	490
100.0	D	125	LSR100 / 16D _ 125	16.0	6	1095	986	438
100.0	D	150	LSR100 / 16D _ 150	16.0	6	1000	900	400
100.0	H	55	LSR100 / 16H _ 55	16.0	6	1732	1559	693
100.0	H	100	LSR100 / 16H _ 100	16.0	6	1285	1156	514
100.0	H	125	LSR100 / 16H _ 125	16.0	6	1149	1034	460
100.0	H	150	LSR100 / 16H _ 150	16.0	6	1049	944	420
150.0	D	60	LSR150 / 16D _ 60	24.0	6	1581	1423	632
150.0	D	85	LSR150 / 16D _ 85	24.0	6	1328	1196	531
150.0	D	100	LSR150 / 16D _ 100	24.0	6	1225	1103	490
150.0	D	125	LSR150 / 16D _ 125	24.0	6	1095	986	438
150.0	D	150	LSR150 / 16D _ 150	24.0	6	1000	900	400
150.0	H	30	LSR150 / 16H _ 30	24.0	6	3000	2700	1200
150.0	H	40	LSR150 / 16H _ 40	24.0	6	2598	2338	1039
150.0	H	100	LSR150 / 16H _ 100	24.0	6	1285	1156	514
150.0	Z	45	LSR150 / 16Z _ 45	24.0	6	2357	2121	943
150.0	Z	75	LSR150 / 16Z _ 75	24.0	8	1826	1643	730
220.0	H	25	LSR220 / 16H _ 25	35.2	6	3286	2958	1315
220.0	H	40	LSR220 / 16H _ 40	35.2	6	2598	2338	1039
220.0	H	100	LSR220 / 16H _ 100	35.2	10	1285	1156	514
220.0	H	150	LSR220 / 16H _ 150	35.2	10	1049	944	420
220.0	Z	50	LSR220 / 16Z _ 50	35.2	8	2236	2012	894
220.0	Z	75	LSR220 / 16Z _ 75	35.2	8	1825	1643	730
220.0	Z	100	LSR220 / 16Z _ 100	35.2	8	1581	1423	632
220.0	Z	150	LSR220 / 16Z _ 150	35.2	8	1290	1162	516

20 V DC @ 85°C

1.0	A	3000	LSR1 / 20A _ 3000	0.5	4	158	142	63
2.2	A	3000	LSR2.2 / 20A _ 3000	0.5	6	158	142	63
3.3	A	2500	LSR3.3 / 20A _ 2500	0.7	6	173	156	69
3.3	B	1300	LSR3.3 / 20B _ 1300	0.7	6	256	230	102
4.7	A	1800	LSR4.7 / 20A _ 1800	0.9	6	204	183	82
4.7	B	750	LSR4.7 / 20B _ 750	0.9	6	337	303	135
4.7	B	1000	LSR4.7 / 20B _ 1000	0.9	6	292	262	117
6.8	A	1000	LSR6.8 / 20A _ 1000	1.4	6	274	246	110
6.8	B	600	LSR6.8 / 20B _ 600	1.4	6	376	339	151
6.8	B	1000	LSR6.8 / 20B _ 1000	1.4	6	292	262	117
6.8	C	700	LSR6.8 / 20C _ 700	1.4	6	396	357	159

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards

PART NUMBERS & SPECIFICATIONS

Capacitance μF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL μA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

20 V DC @ 85°C cont.

10.0	B	500	LSR10 / 20B _ 500	2.0	6	412	371	165
10.0	B	1000	LSR10 / 20B _ 1000	2.0	6	292	261	117
10.0	C	500	LSR10 / 20C _ 500	2.0	6	469	422	188
10.0	C	700	LSR10 / 20C _ 700	2.0	6	396	357	159
15.0	B	500	LSR15 / 20B _ 500	3.0	6	412	371	165
15.0	C	400	LSR15 / 20C _ 400	3.0	6	524	472	210
15.0	C	450	LSR15 / 20C _ 450	3.0	6	494	442	198
22.0	B	400	LSR22 / 20B _ 400	4.4	6	461	415	184
22.0	B	600	LSR22 / 20B _ 600	4.4	6	376	339	151
22.0	C	100	LSR22 / 20C _ 100	4.4	6	1049	944	420
22.0	C	150	LSR22 / 20C _ 150	4.4	6	856	771	343
22.0	C	400	LSR22 / 20C _ 400	4.4	6	524	472	210
22.0	D	200	LSR22 / 20D _ 200	4.4	6	866	779	346
22.0	D	300	LSR22 / 20D _ 300	4.4	6	707	636	283
33.0	C	300	LSR33 / 20C _ 300	6.6	6	606	545	242
33.0	D	100	LSR33 / 20D _ 100	6.6	6	1225	1102	490
33.0	D	200	LSR33 / 20D _ 200	6.6	6	866	779	346
47.0	D	75	LSR47 / 20D _ 75	9.4	6	1414	1273	566
47.0	D	100	LSR47 / 20D _ 100	9.4	6	1225	1102	490
47.0	D	200	LSR47 / 20D _ 200	9.4	6	866	779	346
47.0	H	70	LSR47 / 20H _ 70	9.4	6	1535	1382	614
47.0	H	125	LSR47 / 20H _ 125	9.4	6	1149	1034	460
47.0	H	150	LSR47 / 20H _ 150	9.4	6	1049	944	420
47.0	H	200	LSR47 / 20H _ 200	9.4	6	908	817	363
47.0	H	250	LSR47 / 20H _ 250	9.4	6	812	731	325
68.0	D	70	LSR68 / 20D _ 70	13.6	6	1464	1317	586
68.0	D	150	LSR68 / 20D _ 150	13.6	6	1000	900	400
68.0	D	200	LSR68 / 20D _ 200	13.6	6	866	779	346
68.0	D	300	LSR68 / 20D _ 300	13.6	6	707	636	283
68.0	H	125	LSR68 / 20H _ 125	13.6	6	1149	1034	460
68.0	H	150	LSR68 / 20H _ 150	13.6	6	1049	944	420
68.0	H	200	LSR68 / 20H _ 200	13.6	6	908	817	363
100.0	D	85	LSR100/ 20D _ 85	20.0	6	1328	1196	531
100.0	D	100	LSR100/ 20D _ 100	20.0	6	1225	1102	490
100.0	D	150	LSR100/ 20D _ 150	20.0	6	1000	900	400
100.0	H	35	LSR100/ 20H _ 35	20.0	6	2777	2500	1111
100.0	H	45	LSR100/ 20H _ 45	20.0	6	2449	2205	980
100.0	H	100	LSR100/ 20H _ 100	20.0	6	1285	1156	514
100.0	H	150	LSR100/ 20H _ 150	20.0	6	1049	944	420
100.0	H	200	LSR100/ 20H _ 200	20.0	6	908	817	363
100.0	Z	60	LSR100/ 20Z _ 60	20.0	8	2041	1837	816
100.0	Z	85	LSR100/ 20Z _ 85	20.0	8	1715	1543	686
100.0	Z	100	LSR100/ 20Z _ 100	20.0	8	1581	1423	632
100.0	Z	200	LSR100/ 20Z _ 200	20.0	8	1118	1005	447
150.0	H	35	LSR150/ 20H _ 35	30.0	10	2777	2500	1111
150.0	Z	80	LSR150/ 20Z _ 80	30.0	8	1768	1591	707

25 V DC @ 85°C

0.47	A	7000	LSR.47 / 25A _ 7000	0.5	4	103	93	41
0.68	A	6000	LSR.68 / 25A _ 6000	0.5	4	112	101	45
1.5	A	3000	LSR1.5 / 25A _ 3000	0.4	6	158	141	63
1.5	B	1800	LSR1.5 / 25B _ 1800	0.5	6	217	196	87
2.2	B	900	LSR2.2 / 25B _ 900	0.6	6	307	277	123
2.2	B	1200	LSR2.2 / 25B _ 1200	0.6	6	266	240	106
2.2	B	2500	LSR2.2 / 25B _ 2500	0.6	6	184	166	74
3.3	A	1000	LSR3.3 / 25A _ 1000	0.8	6	274	246	110
3.3	A	1500	LSR3.3 / 25A _ 1500	0.8	6	224	201	89
3.3	B	750	LSR3.3 / 25B _ 750	0.8	6	337	303	135
3.3	B	1500	LSR3.3 / 25B _ 1500	0.8	6	238	214	95
3.3	B	2000	LSR3.3 / 25B _ 2000	0.8	6	206	186	82
4.7	B	700	LSR4.7 / 25B _ 700	1.2	6	348	314	139
4.7	B	900	LSR4.7 / 25B _ 900	1.2	6	307	277	123

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.

PART NUMBERS & SPECIFICATIONS

Capacitance μF <small>(microfarads)</small>	Case Size	ESR @ 100Khz max. mΩ <small>(milliohms)</small>	Nemco Part No.	DCL μA max. <small>(microamps)</small>	tan δ max. (%)	Max. Ripple Current @ 100kHz mA <small>(milliamps)</small>		
						25°C	85°C	125°C

25 V DC @ 85°C cont.

4.7	B	1500	LSR4.7 / 25B _ 1500	1.2	6	238	213	95
6.8	B	700	LSR6.8 / 25B _ 700	1.7	6	348	314	139
6.8	C	500	LSR6.8 / 25C _ 500	1.7	6	469	422	188
6.8	C	600	LSR6.8 / 25C _ 600	1.7	6	428	385	171
6.8	C	700	LSR6.8 / 25C _ 700	1.7	6	396	357	159
10.0	B	1800	LSR10 / 25B _ 1800	2.5	6	217	196	87
10.0	C	300	LSR10 / 25C _ 300	2.5	6	606	545	242
10.0	C	500	LSR10 / 25C _ 500	2.5	6	469	420	188
15.0	C	220	LSR15 / 25C _ 220	3.8	6	707	636	283
15.0	C	300	LSR15 / 25C _ 300	3.8	6	606	545	242
15.0	D	100	LSR15 / 25D _ 100	3.8	6	1225	1102	490
15.0	D	300	LSR15 / 25D _ 300	3.8	6	707	636	283
22.0	C	275	LSR22 / 25C _ 275	5.5	6	632	569	253
22.0	C	400	LSR22 / 25C _ 400	5.5	6	524	472	210
22.0	D	100	LSR22 / 25D _ 100	5.5	6	1225	1102	490
22.0	D	200	LSR22 / 25D _ 200	5.5	6	866	779	346
22.0	D	300	LSR22 / 25D _ 300	5.5	6	707	636	283
33.0	D	100	LSR33 / 25D _ 100	8.3	6	1225	1102	490
33.0	D	200	LSR33 / 25D _ 200	8.3	6	866	779	346
33.0	D	300	LSR33 / 25D _ 300	8.3	6	707	636	283
33.0	H	100	LSR33 / 25H _ 100	8.3	6	1285	1156	514
33.0	H	175	LSR33 / 25H _ 175	8.3	6	971	874	388
33.0	H	200	LSR33 / 25H _ 200	8.3	6	908	817	363
33.0	H	300	LSR33 / 25H _ 300	8.3	6	742	665	297
47.0	D	125	LSR47 / 25D _ 125	11.8	6	1095	986	438
47.0	D	150	LSR47 / 25D _ 150	8.3	6	1000	900	400
47.0	D	250	LSR47 / 25D _ 250	8.3	6	775	697	310
47.0	H	80	LSR47 / 25H _ 80	8.3	6	1436	1293	574
47.0	H	100	LSR47 / 25H _ 100	8.3	6	1285	1156	514
47.0	H	125	LSR47 / 25H _ 125	8.3	6	1149	1034	460
68.0	H	45	LSR68 / 25H _ 45	17.0	6	2449	2205	980
68.0	H	55	LSR68 / 25H _ 55	17.0	6	2216	1994	886
68.0	H	125	LSR68 / 25H _ 125	17.0	6	1149	1034	459
68.0	H	200	LSR68 / 25H _ 200	17.0	6	908	817	363
68.0	Z	80	LSR68 / 25Z _ 80	17.0	6	1768	1591	707
68.0	Z	95	LSR68 / 25Z _ 95	17.0	8	1622	1460	649
68.0	Z	150	LSR68 / 25Z _ 150	17.0	8	1291	1162	516
68.0	Z	200	LSR68 / 25Z _ 200	17.0	6	1118	1006	447
100.0	Z	100	LSR100 / 25Z _ 100	25.0	8	1581	1423	632

35 V DC @ 85°C

0.22	A	6000	LSR.22 / 35A _ 6000	0.5	4	112	101	45
0.33	A	6000	LSR.33 / 35A _ 6000	0.5	4	112	101	45
0.47	A	6000	LSR.47 / 35A _ 6000	0.5	4	112	101	45
0.47	B	4000	LSR.47 / 35B _ 4000	0.5	4	146	131	58
0.68	A	6000	LSR.68 / 35A _ 6000	0.5	4	112	101	45
1.0	A	3000	LSR1 / 35A _ 3000	0.5	4	158	142	63
1.0	B	2000	LSR1 / 35B _ 2000	0.5	4	206	186	82
1.5	B	2500	LSR1.5 / 35B _ 2500	0.5	6	184	166	74
2.2	A	1500	LSR2.2 / 35A _ 1500	0.8	6	224	201	89
2.2	B	750	LSR2.2 / 35B _ 750	0.8	6	337	303	135
2.2	B	1500	LSR2.2 / 35B _ 1500	0.8	6	238	214	95
2.2	B	2000	LSR2.2 / 35B _ 2000	0.8	6	206	186	82
2.2	C	1000	LSR2.2 / 35C _ 1000	0.8	6	332	298	133
3.3	B	1000	LSR3.3 / 35B _ 1000	1.2	6	292	262	117
3.3	C	700	LSR3.3 / 35C _ 700	1.2	6	396	357	159
4.7	B	700	LSR4.7 / 35B _ 700	1.2	6	348	314	139
4.7	B	1500	LSR4.7 / 35B _ 1500	1.6	6	238	213	95
4.7	C	600	LSR4.7 / 35C _ 600	1.6	6	428	383	171
4.7	D	700	LSR4.7 / 35DC_ 700	1.6	6	463	417	185

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.

PART NUMBERS & SPECIFICATIONS

Capacitance μF (microfarads)	Case Size	ESR @ 100Khz max. mΩ (milliohms)	Nemco Part No.	DCL μA max. (microamps)	tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C

35 V DC @ 85°C cont.

6.8	C	350	LSR6.8 / 35C _ 350	2.4	6	561	505	224
6.8	D	150	LSR6.8 / 35D _ 150	2.4	6	1000	900	400
6.8	D	400	LSR6.8 / 35D _ 400	2.4	6	612	551	245
6.8	D	500	LSR6.8 / 35D _ 500	2.4	6	548	493	219
10.0	D	125	LSR10 / 35D _ 125	3.5	6	1095	986	438
10.0	D	300	LSR10 / 35D _ 300	3.5	6	707	636	283
10.0	H	200	LSR10 / 35H _ 200	3.5	6	908	817	363
15.0	C	350	LSR15 / 35C _ 350	5.3	6	561	505	224
15.0	C	450	LSR15 / 35C _ 450	5.3	6	494	445	198
15.0	D	100	LSR15 / 35D _ 100	5.3	6	1225	1102	490
15.0	D	300	LSR15 / 35D _ 300	5.3	6	707	636	283
22.0	D	125	LSR22 / 35D _ 125	7.7	6	1095	986	438
22.0	D	200	LSR22 / 35D _ 200	7.7	6	866	779	346
22.0	D	300	LSR22 / 35D _ 300	7.7	6	707	636	283
22.0	D	400	LSR22 / 35D _ 400	7.7	6	612	551	245
22.0	H	60	LSR22 / 35H _ 60	8.0	6	2121	1909	849
22.0	H	100	LSR22 / 35H _ 100	7.7	6	1643	1479	657
22.0	H	125	LSR22 / 35H _ 125	7.7	6	1149	1034	460
22.0	H	200	LSR22 / 35H _ 200	7.7	6	908	817	363
22.0	H	300	LSR22 / 35H _ 300	7.7	6	742	665	297
33.0	D	200	LSR33 / 35D _ 200	11.6	6	866	779	346
33.0	D	300	LSR33 / 35D _ 300	11.6	6	707	636	283
33.0	H	50	LSR33 / 35H _ 50	12.0	6	2324	2091	930
33.0	H	65	LSR33 / 35H _ 65	12.0	6	2038	1834	815
33.0	H	100	LSR33 / 35H _ 100	11.6	6	1285	1156	514
33.0	H	250	LSR33 / 35H _ 250	11.6	6	812	731	325
33.0	H	300	LSR33 / 35H _ 300	11.6	6	742	667	297
33.0	Z	200	LSR33 / 35Z _ 200	11.6	6	1118	1006	447
47.0	H	55	LSR47 / 35H _ 55	16.0	6	2216	1994	886
47.0	H	65	LSR47 / 35H _ 65	16.0	6	2038	1834	815
47.0	H	200	LSR47 / 35H _ 200	16.5	6	908	817	363
47.0	H	250	LSR47 / 35H _ 250	16.5	6	812	731	325
47.0	Z	150	LSR47 / 35Z _ 150	16.5	6	1291	1162	516
47.0	Z	200	LSR47 / 35Z _ 200	16.5	6	1118	1006	447
68.0	Z	150	LSR68 / 35Z _ 150	23.8	6	1291	1162	516
68.0	Z	200	LSR68 / 35Z _ 200	23.8	6	1118	1006	447

50 V DC @ 85°C

0.15	A	9000	LSR.15 / 50A _ 9000	0.5	4	91	82	36
0.22	A	7000	LSR.22 / 50A _ 7000	0.5	4	103	93	41
0.47	C	2300	LSR.47 / 50C _ 2300	0.5	4	219	197	87
1.0	C	2500	LSR1 / 50C _ 2500	0.5	4	210	189	84
1.5	C	1500	LSR1.5 / 50C _ 1500	0.8	6	271	243	108
1.5	C	2000	LSR1.5 / 50C _ 2000	0.8	6	234	211	94
2.2	D	1200	LSR2.2 / 50D _ 1200	1.1	6	354	318	141
3.3	D	800	LSR3.3 / 50D _ 800	1.7	6	433	390	173
4.7	D	300	LSR4.7 / 50D _ 300	2.4	6	707	636	283
4.7	D	500	LSR4.7 / 50D _ 500	2.4	6	548	493	219
4.7	D	700	LSR4.7 / 50D _ 700	2.4	6	463	417	185
6.8	D	200	LSR6.8 / 50D _ 200	3.4	6	866	779	346
6.8	D	300	LSR6.8 / 50D _ 300	3.4	6	707	636	283
6.8	D	500	LSR6.8 / 50D _ 500	3.4	6	548	493	219
6.8	D	600	LSR6.8 / 50D _ 600	3.4	6	500	450	200
10.0	H	120	LSR10 / 50H _ 120	5.0	6	1500	1350	600
10.0	H	400	LSR10 / 50H _ 400	5.0	6	642	578	257
10.0	H	500	LSR10 / 50H _ 500	5.0	6	574	517	230
15.0	H	75	LSR15 / 50H _ 75	7.5	6	1897	1708	759
15.0	H	100	LSR15 / 50H _ 100	7.5	6	1643	1479	657
15.0	H	250	LSR15 / 50H _ 250	7.5	6	812	731	325
15.0	Z	250	LSR15 / 50Z _ 250	7.5	6	1000	900	400
22.0	H	75	LSR22 / 50H _ 75	11.0	8	1897	1708	759
22.0	H	100	LSR22 / 50H _ 100	11.0	8	1643	1479	657

_ Insert tolerance M (±20%) or K(±10%) to complete the Nemco part number

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.