LSR SERIES

LOW EQUIVALENT SERIES RESISTANCE TANTALUM CAPACITORS

FEATURES

- Very Low Equivalent Series Resistance (ESR), Ideal for Power Supplies
- High ripple and current capability
- Meets or Exceeds EIA 535 BAAC and IECQ standards (QC300801/US001, IS-28)
- Pre-conditioned, surge current tested for maximum robustness
- Capacitance range: 0.1µF to 1500µF
- Voltage range: 4 to 50 WVDC
- Down sized, extended range values
- Low profile sizes: XL, AL, BL, CL, DL
- Operating Temperature range -55°C to +125°C
- Precision molded case with flat surfaces for vacuum pick-up
- Laser marking and bold videcon – readable polarity
- Compliant terminations
- Glue pad on underside for bonding to circuit board prior to soldering
- Encapsulant material satisfies the UL 94 V0 flammability classification
- MSL (moisture sensitivity level) per IPC/Jedec J-STD-020B is level 1



PART NUMBERING GUIDE

LSR 10 / 35 D K 300 (optional)

SERIES TYPE

CAPACITANCE
in microfarads (µF)
Ex. 0.68µF would be .68

VOLTAGE
4
6(6.3)
10
16
20
25
35
50

CASE SIZE
A (3216-18)
B (3528-21)
C (6032-28)
D (7343-31)
H (7343-43)
Z (7361-38)
XL (2012-12) Low Profile
AL (3216-12) Low Profile
BL (3528-12) Low Profile
CL (6032-15) Low Profile
DL (7343-20) Low Profile

TOLERANCE
M = (±20%)
K = (±10%)

MAXIMUM ESR in milliohms

OPTIONAL
-13 = 13 inch diameter Tape & Reel
<blank> = 7 inch standard Tape & Reel
TL = Tin/Lead

ELECTRICAL SPECIFICATION

Technical Data:	All technical data relate to an ambient temperature of +25°C							
Capacitance Range	0.10µF to 1500µF							
Capacitance Tolerance	±10% (K); ±20% (M)							
Rated Voltage DC (V_R) ≤+85°C	4	6.3	10	16	20	25	35	50
Category Voltage DC (V_C) ≤+125°C	2.7	4	7	10	13	17	23	33
Surge Voltage (V_S) ≤+85°C	5.2	8	13	20	26	32	46	65
Surge Voltage (V_S) ≤+125°C	3.2	5	8	13	16	20	28	40
Temperature Range	-55°C to +125°C with 2/3 Vr (linear derating) required for operation above +85°C							
Reliability	Level M (1% per 1000 hours at rated voltage (V_R), rated temperature (85°C) and 0.1Ω/volt circuit impedance.							
Qualifications	Fixed Tantalum Specifications: EIA 525BAAC and IECQ standards (QC300801/US001, IS-28) Solder-ability: Sn Plated Terminations – meets requirements of IEC 68 2.20 test Ta and MIL-STD=202, Method 208 MSL (moisture sensitivity level): Level 1 of IPC/Jedec J-STD-020B							

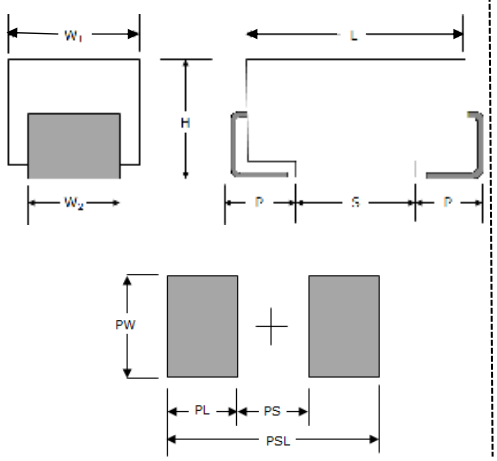
CASE SIZE CROSS REFERENCE: CAPACITANCE AND VOLTAGE RATING (Rated Voltage DC@ 85°C)

Cap (µF)	2.5V	4V	6.3V	10V	16V	20V	25V	35V	50V
0.15									A
0.22								A	A
0.33								A	A
0.47							A	A, B	A, B, C
0.68							A	A	B
1.0				XL	A	A, XL, AL, BL	A, XL	A, B	B, C
1.5						A	A, B	A, B	C
2.2			XL	A	A, BL	A, B	A, B	A, B, C	C, D
3.3			A	BL	A, B	A, B	A, B	B, C	C, D
4.7			AL	A, B, XL	A, B	A, B	B, C	B, C, D	C, D
6.8			A	A, B, BL	A, B	A, B, C	B, C	C, D	D
10.0		XL	A, B, XL, BL	A, B, AL, BL	A, B, C, BL, CL	B, C, CL	B, C, D	C, D, H, DL	D, H
15.0			A	A, B, C, BL	B, C	B, C	C, D	C, D, DL	H, Z
22.0			A, B, C, AL	A, B, C, BL	B, C, D, CL	B, C, D	C, D	D, H, DL	
33.0			A, B, BL	A, B, C, CL	B, C, D, CL, DL	C, D	C, D, H, DL	D, H, Z	
47.0		A	A, B, C, BL	B, C, D, CL	C, D, CL, DL	D, H	D, H, DL	D, H, Z	
68.0			B, C, CL	B, C, D, CL, DL	C, D, DL	D, H, DL	D, H, Z	Z	
100.0	B	B, BL, CL	B, C, D, CL, DL	B, C, D, H, CL, DL	C, D, H, DL	D, H, Z	H, Z		
150.0	B	B, C	C, D, DL	C, D, H, DL	D, H, Z, DL	Z	Z		
220.0	B, D	D, DL	C, D, H, DL	D, H, DL	D, H, Z				
330.0	DL	C, D	C, D, H, Z, DL	D, H, Z	H				
470.0	D, DL	D, H	D, H, Z, DL	H, Z					
680.0	D, H, DL	D, H	H, Z	H, Z					
1000.0	H, DL	H, Z	H, Z						
1500.0	D, H, Z	H, Z							

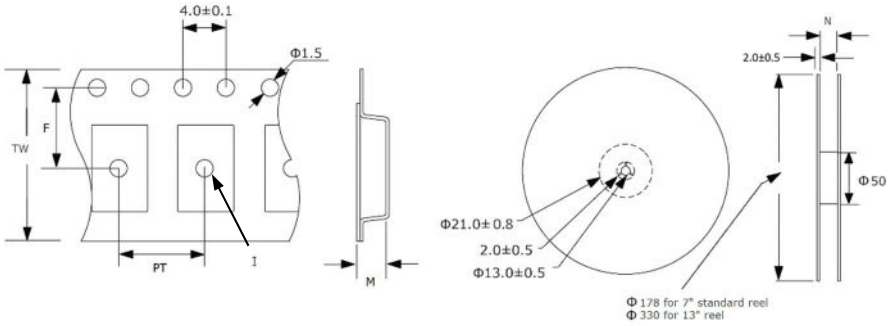
LSR SERIES

LOW EQUIVALENT SERIES RESISTANCE TANTALUM CAPACITORS

OUTLINE DRAWING AND PAD PRINT



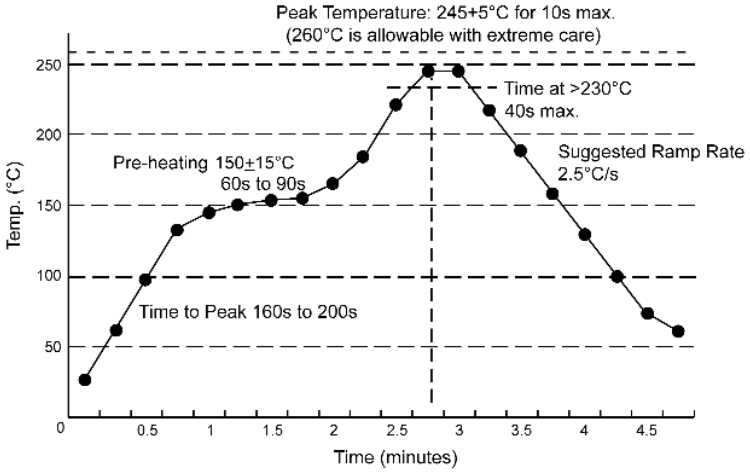
TAPE AND REEL DIMENSION



(3) 0805 Footprint Compatible
(4) 1206 Footprint Compatible
NOTE: Dimensions in millimeters (mm)

NEMCO Size	EIA Size	L ±0.2	W_1 ± 0.2	H (MAX)	W_2 ± 0.1	P ±0.3	S Min.	PSL	PL	PS	PW	TW ±0.3	PT (Pitch)	M (MAX)	I	N ±1	F ±0.05
A(4)	3216-18	3.2	1.6	1.6	1.2	0.8	1.10	3.8	1.4	1.0	1.8	8	4	2.3	1.0	9.5	3.5
B	3528-21	3.5	2.8	1.9	2.2	0.8	1.40	4.0	1.4	1.2	2.8	8	4	2.6	1.0	9.5	3.5
C	6032-28	6.0	3.2	2.6	2.2	1.3	2.90	6.5	2.0	2.5	2.8	12	8	3.3	1.5	13	5.5
D	7343-31	7.3	4.3	2.9	2.4	1.3	4.40	8.0	2.0	4.0	3.0	12	8	3.6	1.5	13	5.5
H	7343-43	7.3	4.3	4.1	2.4	1.3	4.40	8.0	2.0	4.0	3.0	12	8	4.8	1.5	13	5.5
Z	7361-38	7.3	6.1	3.45	3.1	1.4	4.40	8.0	2.0	4.0	3.7	12	8	4.8	1.5	13	5.5
XL(3)	2012-12	2.05	1.3	1.2	1.2	0.5	0.85	2.7	1.0	0.8	1.6	8	4	1.9	1.0	9.5	3.5
AL(4)	3216-12	3.2	1.6	1.2	1.2	0.8	1.10	3.8	1.4	1.0	1.8	8	4	1.9	1.0	9.5	3.5
BL	3528-12	3.5	2.8	1.2	2.2	0.8	1.40	4.0	1.4	1.2	2.8	8	4	1.9	1.0	9.5	3.5
CL	6032-15	6.0	3.2	1.5	2.2	1.3	2.90	6.5	2.0	2.5	2.8	8	4	1.9	1.0	9.5	3.5
DL	7343-20	7.3	4.3	2.0	2.4	1.3	4.40	8.0	2.0	4.0	3.0	8	4	1.7	1.0	9.5	3.5

REFLOW PROFILE



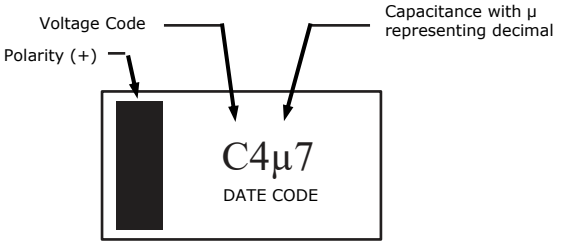
Tantalum capacitors are lead-free system compatible system components, meeting the requirements of J-STD-020 standard. Maximum peak temperature 260°C for 10 seconds maximum, 3 reflow cycles.

There are several important general soldering considerations for tantalum capacitors.

- Soldering temperature and time should be the minimum for a good connection.
- Recommended soldering profiles are designed to insure that the temperature of the internal construction of the capacitors does not exceed +220°C.
- Positioning capacitors near components radiating heat such as power transistors should be avoided.
- Allow for an increase to ESR ratings of 1.25 x catalog limit post PCB assembly.

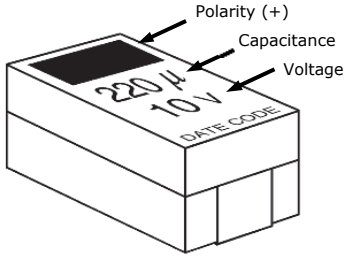
MARKING

Case Sizes: XL, A, AL, B, BL



C4µ7 = 4.7 µfd / 16V

Case Sizes: C, CL, D, DL, H, Z



Voltage VDC	4V	6.3V	10V	16V	20V	25V	35V	50V
Voltage Code	G	J	A	C	D	E	V	T

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.

142 Technology Dr., Suite 150
Irvine, CA 92618

www.nemcocaps.com

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

REV. 05/11/21

Telephone • 949.783.7300
Facsimile • 949.783.7301

RATINGS AND PART NUMBER REFERENCE

2.5 Volt @ 85°C (1.7 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
100.0	B	200	LSR100 / 2B _ 200	2.5	8	652	587	261
150.0	B	150	LSR150 / 2B _ 150	3.0	10	753	677	301
220.0	B	150	LSR220 / 2B _ 150	4.4	16	753	677	301
220.0	B	200	LSR220 / 2B _ 200	4.4	16	652	587	261
220.0	B	600	LSR220 / 2B _ 600	4.4	16	376	339	151
220.0	D	45	LSR220 / 2D _ 45	5.5	8	1826	1643	730
330.0	DL	40	LSR330 / 2DL _ 40	8.2	8	1768	1591	707
470.0	D	35	LSR470 / 2D _ 35	11.6	8	2070	1863	828
470.0	DL	100	LSR470 / 2DL _ 100	11.0	12	1118	1006	447
680.0	D	35	LSR680 / 2D _ 35	17.0	16	2070	1863	828
680.0	D	50	LSR680 / 2D _ 50	17.0	16	1732	1559	693
680.0	H	35	LSR680 / 2H _ 35	17.0	10	2171	1954	868
680.0	H	50	LSR680 / 2H _ 50	17.0	10	1817	1635	727
680.0	DL	100	LSR680 / 2DL _ 100	17.0	12	1118	1006	447
1000.0	H	30	LSR1000 / 2H _ 30	25.0	14	2345	2111	938
1000.0	H	40	LSR1000 / 2H _ 40	25.0	14	2031	1828	812
1000.0	DL	100	LSR1000 / 2DL _ 100	25.0	30	1118	1006	447
1500.0	D	100	LSR1500 / 2D _ 100	37.5	60	1125	1102	490
1500.0	H	50	LSR1500 / 2H _ 50	37.5	20	1817	1635	727
1500.0	Z	30	LSR1500 / 2Z _ 30	30.0	20	2887	2598	1155
1500.0	Z	40	LSR1500 / 2Z _ 40	30.0	20	2500	2250	1000

4 Volt @ 85°C (2.7 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
10.0	XL	3000	LSR10 / 4XL _ 3000	0.5	6	135	122	54
47.0	A	500	LSR47 / 4A _ 500	1.9	8	387	349	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
100.0	BL	500	LSR100 / 4BL _ 500	4.0	14	400	360	160
100.0	CL	100	LSR100 / 4CL _ 100	4.0	6	949	854	379
150.0	B	250	LSR150 / 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
220.0	DL	40	LSR220 / 4DL _ 40	8.8	8	1768	1591	707
220.0	DL	50	LSR220 / 4DL _ 50	8.8	8	1581	1423	632
220.0	DL	75	LSR220 / 4DL _ 75	8.8	8	1291	1162	516
330.0	C	100	LSR330 / 4C _ 100	13.2	8	1049	944	420
330.0	D	35	LSR330 / 4D _ 35	13.2	8	2070	1863	828
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	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	10	1915	1723	766
470.0	H	100	LSR470 / 4H _ 100	18.8	10	1285	1156	514
680.0	D	45	LSR680 / 4D _ 45	27.2	14	1826	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	40	LSR680 / 4H _ 40	27.2	10	2031	1828	812
680.0	H	60	LSR680 / 4H _ 60	27.2	10	1658	1492	663

CONTINUED ON NEXT PAGE

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.

RATINGS AND PART NUMBER REFERENCE

4 Volt @ 85°C (2.7 V DC @ 125°C) CONTINUED

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
680.0	H	100	LSR680 / 4H _ 100	27.2	10	1285	1156	514
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	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	50	LSR1500 / 4H _ 50	60.0	30	1817	1635	727

6.3 Volt @ 85°C (4 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
2.2	XL	7000	LSR2.2 / 6XL _ 7000	0.5	6	89	80	35
3.3	A	2100	LSR3.3 / 6A _ 2100	0.5	6	189	170	76
4.7	AL	4000	LSR4.7 / 6AL _ 4000	0.5	6	127	115	51
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	201	89
10.0	B	1500	LSR10 / 6B _ 1500	0.6	6	238	214	95
10.0	XL	1000	LSR10 / 6XL _ 1000	0.6	8	235	211	94
10.0	XL	1500	LSR10 / 6XL _ 1500	0.6	8	191	172	77
10.0	XL	3000	LSR10 / 6XL _ 3000	0.6	8	135	122	54
10.0	BL	1000	LSR10 / 6BL _ 1000	0.6	6	283	255	113
15.0	A	700	LSR15 / 6A _ 700	0.9	6	327	295	131
15.0	A	1500	LSR15 / 6A _ 1500	0.9	6	224	201	89
22.0	A	300	LSR22 / 6A _ 300	1.4	6	500	450	200
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
22.0	C	500	LSR22 / 6C _ 500	1.4	6	469	422	188
22.0	AL	900	LSR22 / 6AL _ 900	1.3	10	269	242	107
33.0	A	600	LSR33 / 6A _ 600	2.1	8	354	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	339	151
33.0	BL	800	LSR33 / 6BL _ 800	2.1	10	316	285	126
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
47.0	BL	1200	LSR47 / 6BL _ 1200	2.8	10	258	232	103
68.0	B	250	LSR68 / 6B _ 250	4.0	8	583	525	233
68.0	B	350	LSR68 / 6B _ 350	4.0	8	493	444	197
68.0	B	500	LSR68 / 6B _ 500	4.0	8	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
68.0	CL	110	LSR68 / 6CL _ 110	4.3	6	905	814	362
68.0	CL	125	LSR68 / 6CL _ 125	4.3	6	849	764	339
68.0	CL	250	LSR68 / 6CL _ 250	4.3	6	600	540	240
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	1090	484
100.0	C	150	LSR100 / 6C _ 150	6.3	6	856	771	343
100.0	D	300	LSR100 / 6D _ 300	6.3	6	707	636	283

CONTINUED ON NEXT PAGE

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.

RATINGS AND PART NUMBER REFERENCE

6.3 Volt @ 85°C (4 V DC @ 125°C) CONTINUED								
Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
100.0	CL	100	LSR100 / 6CL _ 100	6.3	6	949	854	379
100.0	CL	150	LSR100 / 6CL _ 150	6.3	6	775	697	310
100.0	DL	100	LSR100 / 6DL _ 100	6.3	6	1118	1006	447
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	9.5	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
150.0	DL	40	LSR150 / 6DL _ 40	9.5	6	1768	1591	707
150.0	DL	50	LSR150 / 6DL _ 50	9.5	6	1581	1423	632
220.0	C	70	LSR220 / 6C _ 70	13.9	8	1254	1128	501
220.0	C	100	LSR220 / 6C _ 100	13.9	8	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	8	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	1225	1102	490
220.0	D	125	LSR220 / 6D _ 125	13.9	8	1095	986	438
220.0	H	100	LSR220 / 6H _ 100	13.9	8	1285	1156	514
220.0	DL	100	LSR220 / 6DL _ 100	13.9	8	1118	1006	447
220.0	DL	150	LSR220 / 6DL _ 150	13.9	8	913	822	365
330.0	C	80	LSR330 / 6C _ 80	19.8	12	1173	1055	469
330.0	C	100	LSR330 / 6C _ 100	19.8	12	1049	944	420
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	1225	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
330.0	Z	100	LSR330 / 6Z _ 100	20.8	8	1581	1423	632
330.0	DL	75	LSR330 / 6DL _ 75	20.8	12	1291	1162	516
330.0	DL	100	LSR330 / 6DL _ 100	20.8	12	1118	1006	447
330.0	DL	150	LSR330 / 6DL _ 150	20.8	12	913	822	365
470.0	D	45	LSR470 / 6D _ 45	28.0	12	1826	1643	730
470.0	D	60	LSR470 / 6D _ 60	28.0	12	1581	1423	632
470.0	D	100	LSR470 / 6D _ 100	28.0	12	1225	1102	490
470.0	D	200	LSR470 / 6D _ 200	28.0	12	866	779	346
470.0	H	45	LSR470 / 6H _ 45	28.0	10	1915	1723	766
470.0	H	50	LSR470 / 6H _ 50	28.0	10	1817	1635	727
470.0	H	60	LSR470 / 6H _ 60	28.0	10	1658	1492	663
470.0	H	100	LSR470 / 6H _ 100	28.0	10	1285	1156	514
470.0	H	200	LSR470 / 6H _ 200	28.0	10	908	817	363
470.0	Z	40	LSR470 / 6Z _ 40	28.0	10	2500	2250	1000
470.0	Z	55	LSR470 / 6Z _ 55	28.0	10	2132	1919	853
470.0	Z	100	LSR470 / 6Z _ 100	28.0	10	1581	1423	632
470.0	DL	150	LSR470 / 6DL _ 150	28.2	20	913	822	365
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	1285	1156	514
680.0	Z	35	LSR680 / 6Z _ 35	42.8	10	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	H	100	LSR1000 / 6H _ 100	60.0	20	1285	1156	514
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

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.

RATINGS AND PART NUMBER REFERENCE

10 Volt @ 85°C (7 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
1.0	XL	9000	LSR1 / 10XL _ 9000	0.5	4	78	70	31
2.2	A	1800	LSR2.2 / 10A _ 1800	0.5	6	204	184	82
3.3	BL	1500	LSR3.3 / 10BL _ 1500	0.5	6	231	208	92
4.7	A	1400	LSR4.7 / 10A _ 1400	0.5	6	231	208	93
4.7	B	1400	LSR4.7 / 10B _ 1400	0.5	6	246	222	99
4.7	XL	3000	LSR4.7 / 10XL _ 3000	0.5	6	135	122	54
4.7	XL	5000	LSR4.7 / 10XL _ 5000	0.5	6	105	94	42
6.8	A	1800	LSR6.8 / 10A _ 1800	0.7	6	204	184	82
6.8	B	1300	LSR6.8 / 10B _ 1300	0.7	6	256	230	102
6.8	BL	1800	LSR6.8 / 10BL _ 1800	0.7	6	211	190	84
10.0	A	900	LSR10 / 10A _ 900	1.0	6	289	260	115
10.0	A	1800	LSR10 / 10A _ 1800	1.0	6	204	184	82
10.0	B	1000	LSR10 / 10B _ 1000	1.0	6	292	262	117
10.0	AL	900	LSR10 / 10AL _ 900	1.0	8	269	242	107
10.0	BL	1000	LSR10 / 10BL _ 1000	1.0	6	283	255	113
10.0	BL	2000	LSR10 / 10BL _ 2000	1.0	6	200	180	80
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
15.0	C	700	LSR15 / 10C _ 700	1.5	6	396	357	159
15.0	BL	1200	LSR15 / 10BL _ 1200	1.5	8	258	232	103
22.0	A	900	LSR22 / 10A _ 900	2.2	8	289	260	115
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	314	139
22.0	C	300	LSR22 / 10C _ 300	2.2	6	606	545	242
22.0	BL	800	LSR22 / 10BL _ 800	2.2	8	316	285	126
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	487	217
33.0	C	500	LSR33 / 10C _ 500	3.3	6	469	422	188
33.0	CL	350	LSR33 / 10CL _ 350	3.3	6	507	456	203
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
47.0	D	300	LSR47 / 10D _ 300	4.7	6	707	636	283
47.0	CL	125	LSR47 / 10CL _ 125	4.7	6	849	764	339
47.0	CL	150	LSR47 / 10CL _ 150	4.7	6	775	697	310
47.0	CL	250	LSR47 / 10CL _ 250	4.7	6	600	540	240
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	606	545	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
68.0	DL	100	LSR68 / 10DL _ 100	6.8	6	1118	1006	447
68.0	DL	200	LSR68 / 10DL _ 200	6.8	6	791	712	316
68.0	CL	100	LSR68 / 10CL _ 100	6.8	6	949	854	379
68.0	CL	150	LSR68 / 10CL _ 150	6.8	6	775	697	310

CONTINUED ON NEXT PAGE

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.

RATINGS AND PART NUMBER REFERENCE

10 Volt @ 85°C (7 V DC @ 125°C) CONTINUED								
Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
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
100.0	H	125	LSR100 / 10H _ 125	10.0	6	1149	1034	460
100.0	CL	150	LSR100 / 10CL _ 150	10.0	6	775	697	310
100.0	DL	100	LSR100 / 10DL _ 100	10.0	6	1118	1006	447
100.0	DL	150	LSR100 / 10DL _ 150	10.0	6	913	822	365
100.0	DL	200	LSR100 / 10DL _ 200	10.0	6	791	712	316
150.0	C	150	LSR150 / 10C _ 150	15.0	8	856	771	343
150.0	D	50	LSR150 / 10D _ 50	15.0	8	1732	1559	693
150.0	D	85	LSR150 / 10D _ 85	15.0	8	1328	1196	531
150.0	D	100	LSR150 / 10D _ 100	15.0	8	1225	1102	490
150.0	H	100	LSR150 / 10H _ 100	15.0	8	1285	1156	514
150.0	DL	100	LSR150 / 10DL _ 100	15.0	6	1118	1006	447
150.0	DL	150	LSR150 / 10DL _ 150	15.0	6	913	822	365
150.0	DL	200	LSR150 / 10DL _ 200	15.0	6	791	712	316
220.0	D	40	LSR220 / 10D _ 40	22.0	8	1936	1743	775
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
220.0	DL	100	LSR220 / 10DL _ 100	22.0	10	1118	1006	447
220.0	DL	150	LSR220 / 10DL _ 150	22.0	10	913	822	365
220.0	DL	200	LSR220 / 10DL _ 200	22.0	10	791	712	316
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	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	2250	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	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
680.0	H	150	LSR680 / 10H _ 150	68.0	18	1049	944	420
680.0	Z	100	LSR680 / 10Z _ 100	68.0	18	1581	1423	632

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.

RATINGS AND PART NUMBER REFERENCE

16 Volt @ 85°C (10 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
1.0	A	6200	LSR1 / 16A _ 6200	0.5	4	110	99	44
2.2	A	1800	LSR2.2 / 16A _ 1800	0.5	6	204	184	82
2.2	A	3500	LSR2.2 / 16A _ 3500	0.5	6	146	132	59
2.2	BL	2000	LSR2.2 / 16BL _ 2000	0.5	6	200	180	80
3.3	A	3500	LSR3.3 / 16A _ 3500	0.5	6	146	132	59
3.3	B	2500	LSR3.3 / 16B _ 2500	0.5	6	184	166	74
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	A	1000	LSR10 / 16A _ 1000	1.6	6	274	246	110
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
10.0	BL	800	LSR10 / 16BL _ 800	1.6	8	316	285	126
10.0	BL	1000	LSR10 / 16BL _ 1000	1.6	8	283	255	113
10.0	CL	500	LSR10 / 16CL _ 500	1.6	6	424	382	170
10.0	CL	600	LSR10 / 16CL _ 600	1.6	6	387	349	155
15.0	B	500	LSR15 / 16B _ 500	2.4	6	412	371	165
15.0	B	800	LSR15 / 16B _ 800	2.4	6	326	293	130
15.0	C	300	LSR15 / 16C _ 300	2.4	6	606	545	242
15.0	C	700	LSR15 / 16C _ 700	2.4	6	396	357	159
22.0	B	400	LSR22 / 16B _ 400	3.5	6	461	415	184
22.0	B	600	LSR22 / 16B _ 600	3.5	6	376	339	151
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	606	545	242
22.0	C	375	LSR22 / 16C _ 375	3.5	6	542	487	217
22.0	D	700	LSR22 / 16D _ 700	3.5	6	463	417	185
22.0	CL	500	LSR22 / 16CL _ 500	3.5	6	424	382	170
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	280
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
33.0	CL	140	LSR33 / 16CL _ 140	5.3	6	802	722	321
33.0	CL	175	LSR33 / 16CL _ 175	5.3	6	717	645	287
33.0	CL	250	LSR33 / 16CL _ 250	5.3	6	600	540	240
33.0	CL	400	LSR33 / 16CL _ 400	5.3	6	474	427	190
33.0	CL	500	LSR33 / 16CL _ 500	5.3	6	424	382	170
33.0	DL	300	LSR33 / 16DL _ 300	5.3	6	645	581	258
33.0	DL	400	LSR33 / 16DL _ 400	5.3	6	559	503	224
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	1102	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	779	346
47.0	CL	200	LSR47 / 16CL _ 200	7.5	6	671	604	268
47.0	DL	250	LSR47 / 16DL _ 250	7.5	6	707	636	283
68.0	C	125	LSR68 / 16C _ 125	10.9	6	938	844	375
68.0	C	200	LSR68 / 16C _ 200	10.9	6	742	667	297
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

CONTINUED ON NEXT PAGE

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.

RATINGS AND PART NUMBER REFERENCE

16 Volt @ 85°C (10 V DC @ 125°C) CONTINUED

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
68.0	D	150	LSR68 / 16D _ 150	10.9	6	1000	900	400
68.0	DL	150	LSR68 / 16DL _ 150	10.9	6	913	822	365
68.0	DL	200	LSR68 / 16DL _ 200	10.9	6	791	712	316
68.0	DL	250	LSR68 / 16DL _ 250	10.9	6	707	636	283
100.0	C	200	LSR100 / 16C _ 200	16.0	8	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
100.0	DL	100	LSR100 / 16DL _ 100	16.0	8	1118	1006	447
100.0	DL	150	LSR100 / 16DL _ 150	16.0	8	913	822	365
100.0	DL	200	LSR100 / 16DL _ 200	16.0	8	791	712	316
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	1102	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	50	LSR150 / 16H _ 50	24.0	8	1817	1635	727
150.0	H	100	LSR150 / 16H _ 100	24.0	8	1285	1156	514
150.0	Z	45	LSR150 / 16Z _ 45	24.0	8	2357	2121	943
150.0	Z	75	LSR150 / 16Z _ 75	24.0	8	1826	1643	730
150.0	DL	200	LSR150 / 16DL _ 200	24.0	15	791	712	316
220.0	D	200	LSR220 / 16D _ 200	35.2	10	866	779	346
220.0	H	50	LSR220 / 16H _ 50	35.2	10	1817	1635	727
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	1826	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	1291	1162	516
330.0	H	200	LSR330 / 16H _ 200	52.8	30	908	817	363

20 Volt @ 85°C (13 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
1.0	A	3000	LSR1 / 20A _ 3000	0.5	4	158	142	63
1.0	XL	6000	LSR1 / 20XL _ 6000	0.5	4	96	86	38
1.0	AL	6000	LSR1 / 20AL _ 6000	0.5	4	104	94	42
1.0	BL	2000	LSR1 / 20BL _ 2000	0.5	4	200	180	80
1.5	A	3000	LSR1.5 / 20A _ 3000	0.5	6	158	142	63
2.2	A	3000	LSR2.2 / 20A _ 3000	0.5	6	158	142	63
2.2	B	1700	LSR2.2 / 20B _ 1700	0.5	6	224	201	89
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	184	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
10.0	B	500	LSR10 / 20B _ 500	2.0	6	412	371	165

CONTINUED ON NEXT PAGE

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.

RATINGS AND PART NUMBER REFERENCE

20 Volt @ 85°C (13 V DC @ 125°C) CONTINUED

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
10.0	B	1000	LSR10 / 20B _ 1000	2.0	6	292	262	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
10.0	CL	250	LSR10 / 20CL _ 250	2.0	6	600	540	240
10.0	CL	500	LSR10 / 20CL _ 500	2.0	6	424	382	170
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	445	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
68.0	DL	200	LSR68 / 20DL _ 200	13.6	6	791	712	316
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	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	1006	447
150.0	Z	80	LSR150 / 20Z _ 80	30.0	8	1768	1591	707

25 Volt @ 85°C (17 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
0.5	A	7000	LSR0.47 / 25A _ 7000	0.5	4	104	93	41
0.7	A	6000	LSR0.68 / 25A _ 6000	0.5	4	112	101	45
1.0	A	4000	LSR1 / 25A _ 4000	0.5	4	137	123	55
1.0	XL	2500	LSR1 / 25XL _ 2500	0.5	4	148	133	59
1.0	XL	4000	LSR1 / 25XL _ 4000	0.5	4	117	106	47
1.5	A	3000	LSR1.5 / 25A _ 3000	0.5	6	158	142	63
1.5	B	1800	LSR1.5 / 25B _ 1800	0.5	6	217	196	87
2.2	A	2500	LSR2.2 / 25A _ 2500	0.6	6	173	156	69

CONTINUED ON NEXT PAGE

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.

RATINGS AND PART NUMBER REFERENCE

25 Volt @ 85°C (17 V DC @ 125°C) CONTINUED

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
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
4.7	B	1500	LSR4.7 / 25B _ 1500	1.2	6	238	214	95
4.7	C	700	LSR4.7 / 25C _ 700	1.2	6	396	357	159
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	422	188
10.0	D	500	LSR10 / 25D _ 500	2.5	6	548	493	219
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	C	400	LSR33 / 25C _ 400	8.3	6	524	472	210
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	667	297
33.0	DL	200	LSR33 / 25DL _ 200	8.3	6	791	712	316
47.0	D	125	LSR47 / 25D _ 125	11.8	6	1095	986	438
47.0	D	150	LSR47 / 25D _ 150	11.8	6	1000	900	400
47.0	D	250	LSR47 / 25D _ 250	11.8	6	775	697	310
47.0	H	80	LSR47 / 25H _ 80	11.8	6	1436	1293	574
47.0	H	100	LSR47 / 25H _ 100	11.8	6	1285	1156	514
47.0	H	125	LSR47 / 25H _ 125	11.8	6	1149	1034	460
47.0	DL	250	LSR47 / 25DL _ 250	11.8	6	707	636	283
68.0	D	150	LSR68 / 25D _ 150	17.0	6	1000	900	400
68.0	D	200	LSR68 / 25D _ 200	17.0	6	866	779	346
68.0	D	300	LSR68 / 25D _ 300	17.0	6	707	636	283
68.0	H	125	LSR68 / 25H _ 125	17.0	6	1149	1034	460
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	6	1622	1460	649
68.0	Z	150	LSR68 / 25Z _ 150	17.0	6	1291	1162	516
68.0	Z	200	LSR68 / 25Z _ 200	17.0	6	1118	1006	447
100.0	H	150	LSR100 / 25H _ 150	25.0	10	1049	944	420
100.0	Z	100	LSR100 / 25Z _ 100	25.0	8	1581	1423	632
150.0	Z	150	LSR150 / 25Z _ 150	37.5	10	1291	1162	516

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.

RATINGS AND PART NUMBER REFERENCE

35 Volt @ 85°C (23 V DC @ 125°C)

Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
0.2	A	6000	LSR0.22 / 35A _ 6000	0.5	4	112	101	45
0.3	A	6000	LSR0.33 / 35A _ 6000	0.5	4	112	101	45
0.5	A	6000	LSR0.47 / 35A _ 6000	0.5	4	112	101	45
0.5	B	4000	LSR0.47 / 35B _ 4000	0.5	4	146	131	58
0.7	A	6000	LSR0.68 / 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	A	3000	LSR1.5 / 35A _ 3000	0.5	6	158	142	63
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	1.6	6	348	314	139
4.7	B	1500	LSR4.7 / 35B _ 1500	1.6	6	238	214	95
4.7	C	600	LSR4.7 / 35C _ 600	1.6	6	428	385	171
4.7	D	700	LSR4.7 / 35D _ 700	1.6	6	463	417	185
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	C	600	LSR10 / 35C _ 600	3.5	6	428	385	171
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	100	LSR10 / 35H _ 100	3.5	6	1285	1156	514
10.0	H	150	LSR10 / 35H _ 150	3.5	6	1049	944	420
10.0	H	200	LSR10 / 35H _ 200	3.5	6	908	817	363
10.0	DL	250	LSR10 / 35DL _ 250	3.5	6	707	636	283
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
15.0	DL	250	LSR15 / 35DL _ 250	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	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	667	297
22.0	DL	200	LSR22 / 35DL _ 200	7.7	6	791	712	316
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	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	D	300	LSR47 / 35D _ 300	16.5	6	707	636	283
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

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.

RATINGS AND PART NUMBER REFERENCE

50 Volt @ 85°C (33 V DC @ 125°C) CONTINUED								
Capacitance (µF)	Case Size	ESR @ 100kHz max. (mΩ)	Nemco Part Number	DCL (µA) max.	Tan δ max. (%)	Max. Ripple Current @ 100kHz mA (milliamps)		
						25°C	85°C	125°C
0.2	A	9000	LSR0.15 / 50A _ 9000	0.5	4	91	82	37
0.2	A	7000	LSR0.22 / 50A _ 7000	0.5	4	104	93	41
0.3	A	7000	LSR0.33 / 50A _ 7000	0.5	4	104	93	41
0.5	A	6500	LSR0.47 / 50A _ 6500	0.5	4	107	97	43
0.5	B	6000	LSR0.47 / 50B _ 6000	0.5	4	119	107	48
0.5	C	2300	LSR0.47 / 50C _ 2300	0.5	4	219	197	87
0.7	B	4000	LSR0.68 / 50B _ 4000	0.5	4	146	131	58
1.0	B	3000	LSR1 / 50B _ 3000	0.5	6	168	151	67
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	244	108
1.5	C	2000	LSR1.5 / 50C _ 2000	0.8	6	235	211	94
2.2	C	1500	LSR2.2 / 50C _ 1500	1.1	8	271	244	108
2.2	D	1200	LSR2.2 / 50D _ 1200	1.1	6	354	318	141
3.3	C	1000	LSR3.3 / 50C _ 1000	1.6	6	332	298	133
3.3	D	800	LSR3.3 / 50D _ 800	1.7	6	433	390	173
4.7	C	800	LSR4.7 / 50C _ 800	2.4	6	371	334	148
4.7	D	250	LSR4.7 / 50D _ 250	2.4	6	775	697	310
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	D	500	LSR10 / 50D _ 500	5.0	6	548	493	219
10.0	H	250	LSR10 / 50H _ 250	5.0	6	812	731	325
10.0	H	300	LSR10 / 50H _ 300	5.0	6	742	667	297
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	250	LSR15 / 50H _ 250	7.5	6	812	731	325
15.0	Z	250	LSR15 / 50Z _ 250	7.5	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.

Case Size	Case Size	Standard Packaging	Available
Nemco	EIQ IECQ	7" Reel Quantity	13" Reel Quantity
A	3216-18	**2000**	8000
B	3528-21	**2000**	8000
C	6032-28	**500**	3000
D	7343-31	**500**	2500
H	7343-43	**400**	1500
Z	7361-37	**400**	1500
Low Profile Sizes			
XL	2012-12	**2500**	10000
AL	3216-12	**2500**	10000
BL	3528-12	**2500**	10000
CL	6032-15	**1000**	5000
DL	7343-20	**1000**	5000