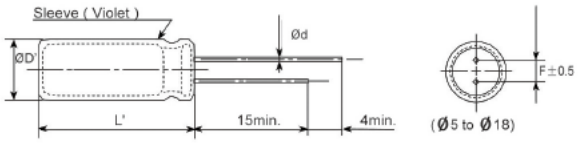
LRJ Series

- Low impedance & Long life design.
- Life time: +105°C 12000 hours.
- Suit for Digital Household Appliance、Car-Audio、Tuner、SMPS、Adaptor...
- RoHs Compliant

◆ SPECIFICATIONS

Items	Characteristics										
Category Temperature Range	-40 ~ +105°C							-25 ~ +105°C			
Rated Voltage Range	6.3 ~ 100 Vdc							160 ~ 450 Vdc			
Capacitance Tolerance	±20%(M)							(at 20°C, 120Hz)			
Leakage Current	6.3 to 100Vdc :I=0.01CV(μA) or 3μA, which is greater.							160 to 450Vdc : I≤0.04CV +100μA			
	Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage(V) (at 20°C after 1 minutes)										
Dissipation Factor (tan δ)	Rated Voltage (Vdc)	6.3v	10v	16v	25v	35v	50v	63v	80v	100v	160 to 250v	350 ~ 450v
	tanδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08	0.20	0.24
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase . (at 20°C, 120Hz)										
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage (Vdc)	6.3 to 100v			160 to 250v		350 to 450v		(at 120Hz)		
	Z(-25°C)/Z(+20°C)	2max			3		6				
	Z(-40°C)/Z(+20°C)	3max			6		6				
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 12000 hours at 105°C.										
	Capacitance change	≤±20% of the initial value.									
	D.F. (tan δ)	≤150% of the initial specified value.									
	Leakage current	≤ The initial specified value.									
Shelf Life	The following specifications shall be satisfied when the capacitors performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C after exposing them for 1000hours at 105°C without voltage applied.										
	Capacitance change	≤±20% of the initial value.									
	D.F. (tan δ)	≤200% of the initial specified value.									
	Leakage current	≤The initial specified value.									

◆ DIMENSIONS [mm]



φD	5	6.3	8	10	12.5	16	18	22
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8	1.0
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0
φD'					φD+0.5max.			
L'					L+2.0max.			

◆ RATED RIPPLE CURRENT MULTIPLIERS

FREQUENCY COEFFICIENT

Freq.(Hz) / μF	120	1K	10K	100K
6.8 ~ 180	0.40	0.75	0.90	1.00
220 ~ 560	0.44	0.85	0.94	1.00
680 ~ 1800	0.60	0.87	0.95	1.00
2200 ~ 3900	0.75	0.90	0.95	1.00
4700 ~	0.85	0.95	0.98	1.00

Part number system for Radial type:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		L	R	J	2	G	1	0	0	E	G	0	2	0	M
Type of series					Voltage code(V)		Capacitance code(μF)			Sleeve material	Diameter (mm)	The length(mm)			Capacitance tolerance

◆ Standard Rating of LRJ Series (6.3v-100v)

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	IMP.(Ωmax)100KHz		Ripple current mA/105°C, 100KHz
			20°C	-10°C	
6.3(0J)	150	5×11	0.30	1.00	345
	330	6.3×11	0.13	0.41	540
	560	8×11.5	0.072	0.22	830
	820	8×16	0.056	0.17	995
	1000	10×12.5	0.053	0.16	1230
	1200	10×16	0.038	0.12	1430
	1500	10×20	0.023	0.069	1820
	2200	10×25	0.022	0.066	2150
	3300	12.5×20	0.021	0.053	2360
	3900	12.5×25	0.018	0.045	2770
	4700	12.5×30	0.016	0.041	3140
	5600	16×20	0.018	0.045	3290
	6800	16×25	0.016	0.043	3460
10(1A)	100	5×11	0.30	1.00	450
	220	6.3×11	0.13	0.41	650
	470	8×11.5	0.072	0.22	1160
	680	10×12.5	0.053	0.16	1580
	1000	10×16	0.038	0.12	1960
	1200	10×20	0.023	0.069	2200
	1500	10×25	0.022	0.066	2520
	2200	12.5×20	0.021	0.053	3050
	3300	12.5×25	0.018	0.045	3200
	3900	12.5×30	0.016	0.041	3400
	4700	12.5×30	0.015	0.039	3860
	5600	16×25	0.016	0.043	4320
16(1C)	56	5×11	0.30	1.00	390
	120	6.3×11	0.13	0.41	550
	330	8×11.5	0.072	0.22	1090
	470	10×12.5	0.053	0.16	1328
	680	10×16	0.038	0.12	1830
	1000	10×20	0.023	0.069	2230
	1200	10×25	0.022	0.066	2350
	1500	12.5×20	0.021	0.053	2660
	2200	12.5×25	0.018	0.045	2870
	2700	12.5×30	0.016	0.041	3590
	3300	12.5×30	0.015	0.039	3860
	3900	16×25	0.016	0.043	4320
	4700	16×25	0.015	0.041	4420
	6800	16×25	0.014	0.049	4580
25(1E)	47	5×11	0.30	1.00	450
	100	6.3×11	0.13	0.41	700
	220	8×11.5	0.072	0.22	1200
	330	10×12.5	0.053	0.16	1620
	470	10×16	0.038	0.12	1830
	680	10×20	0.023	0.069	2320
	820	10×25	0.022	0.066	2660
	1000	12.5×20	0.021	0.053	2750
	1500	12.5×25	0.018	0.045	2870
	1800	12.5×30	0.016	0.041	3390
	2200	16×25	0.015	0.040	3860
	2700	16×25	0.015	0.039	3930
	3300	16×35	0.014	0.039	4360
	3900	18×35	0.015	0.040	4420
	4700	18×40	0.014	0.037	4550

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	IMP.(Ωmax)100KHz		Ripple current mA/105°C, 100KHz
			20°C	-10°C	
35(1V)	33	5×11	0.30	1.00	450
	56	6.3×11	0.13	0.41	635
	150	8×11.5	0.072	0.22	1260
	220	10×12.5	0.053	0.16	1730
	330	10×16	0.038	0.12	2130
	470	10×20	0.023	0.069	2620
	560	10×25	0.022	0.066	2850
	680	10×20	0.021	0.053	3050
	1000	12.5×25	0.018	0.045	3210
	1200	12.5×30	0.016	0.041	3490
	1500	16×25	0.016	0.039	3810
	1800	16×25	0.016	0.043	4320
	2200	16×35	0.015	0.039	4450
	2700	18×35	0.016	0.041	4670
	3300	18×40	0.015	0.039	4790
50(1H)	22	5×11	0.34	1.18	450
	56	6.3×11	0.14	0.50	735
	100	8×11.5	0.074	0.22	1420
	120	8×11.5	0.061	0.18	1780
	150	10×12.5	0.061	0.18	1890
	180	10×12.5	0.046	0.14	2160
	220	10×16	0.042	0.12	2370
	270	10×20	0.030	0.090	2450
	330	10×25	0.028	0.085	2670
	470	12.5×20	0.027	0.068	2850
	680	12.5×30	0.021	0.052	2960
	820	16×20	0.023	0.059	3370
	1000	16×25	0.021	0.056	3925
	2200	18×30	0.019	0.054	4635
	3300	18×30	0.019	0.054	4995
	3900	22×40	0018	0.052	5288
	4700	22×40	0.018	0.052	5419
63(1J)	15	5×11	0.88	3.5	365
	33	6.3×11	0.35	1.4	395
	56	8×11.5	0.22	0.88	620
	82	10×12.5	0.11	0.44	990
	120	10×16	0.076	0.31	1336
	180	10×20	0.056	0.23	1550
	220	10×25	0.046	0.19	1670
	270	12.5×20	0.041	0.13	1800
	390	12.5×25	0.031	0.093	2290
	470	12.5×30	0.028	0.084	2560
	560	16×25	0.023	0.072	2730
	680	16×25	0.025	0.075	2900
	820	16×30	0.021	0.063	3140
	1000	16×35	0.019	0.057	3300
	1200	16×40	0.018	0.054	3480
	1500	18×35	0.018	0.054	3600
	1800	18×40	0.017	0.051	3890
	2200	18×40	0.017	0.050	4050
	2700	18×40	0.017	0.050	4260
	3300	22×35	0.016	0.049	4420
	3900	22×40	0.015	0.048	4510
	4700	22×40	0.015	0.048	5280

◆ Standard Rating of LRJ Series (6.3v-100v)

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	IMP.(Ωmax)100KHz		Ripple current mA/105°C, 100KHz
			20°C	-10°C	
80(1K)	68	10×12.5	0.17	0.66	990
	100	10×16	0.11	0.47	1190
	120	10×20	0.084	0.34	1350
	150	10×25	0.069	0.28	1570
	220	12.5×20	0.062	0.18	1870
	330	12.5×25	0.047	0.14	2210
	390	12.5×30	0.042	0.13	2420
	470	16×25	0.038	0.12	2780
	560	16×30	0.032	0.095	3060
	680	16×30	0.032	0.095	3120
	820	16×35	0.029	0.086	3300
	1000	18×35	0.027	0.081	3450
	1200	18×40	0.026	0.077	3780
	1500	18×40	0.026	0.076	3910
	1800	18×45	0.025	0.075	4180
	2200	18×45	0.025	0.075	4250
	2700	22×25	0.023	0.073	4330
	3300	22×30	0.023	0.073	4450
	3900	22×40	0.022	0.073	4990

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	IMP.(Ωmax)100KHz		Ripple current mA/105°C, 100KHz
			20°C	-10°C	
100 (2A)	6.8	5×11	1.4	5.6	435
	15	6.3×11	0.57	2.3	510
	27	8×11.5	0.36	1.4	650
	39	10×12.5	0.25	1.0	820
	47	10×12.5	0.17	0.66	950
	56	10×16	0.17	0.66	1290
	68	10×16	0.11	0.47	1350
	82	10×20	0.084	0.34	1490
	100	12.5×20	0.084	0.34	1680
	120	12.5×20	0.069	0.28	1730
	150	12.5×20	0.062	0.18	1900
	220	12.5×25	0.047	0.14	2030
	270	12.5×30	0.042	0.13	2600
	330	16×25	0.038	0.12	2860
	390	16×30	0.032	0.095	3000
	470	18×25	0.032	0.095	3170
	560	18×30	0.030	0.090	3300
	680	18×35	0.027	0.081	3780
	820	18×40	0.026	0.077	4000

◆ Standard Rating of LRJ Series (160v-450v)

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Ripple current(mA/105°C)	
				120Hz	100KHz
160 (2C)	10	10×16	0.20	180	450
	22	10×20	0.20	230	575
	33	10×20	0.20	260	650
	47	10×20	0.20	320	800
	68	12.5×20	0.20	490	1225
	82	12.5×20	0.20	590	1475
	100	12.5×30	0.20	720	1800
	150	16×20	0.20	880	2200
	220	16×25	0.20	1220	3050
	330	18×30	0.20	1560	3900
200 (2D)	10	10×16	0.20	200	500
	22	10×20	0.20	280	700
	33	10×20	0.20	360	900
	47	12.5×20	0.20	450	1125
	68	12.5×20	0.20	565	1412
	82	16×20	0.20	630	1575
	100	16×20	0.20	725	1813
	150	16×25	0.20	970	2425
	220	18×30	0.20	1240	2820
	330	18×35	0.20	1645	3780
250 (2E)	10	10×20	0.20	230	575
	22	10×20	0.20	320	800
	33	12.5×20	0.20	420	1050
	47	12.5×20	0.20	520	1300
	68	16×20	0.20	650	1625
	82	16×20	0.20	730	1825
	100	16×25	0.20	840	2100
	150	18×30	0.20	1100	2750
	220	18×30	0.20	1390	3160

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Ripple current(mA/105°C)	
				120Hz	100KHz
350 (2V)	6.8	10×16	0.24	240	600
	10	10×20	0.24	265	665
	22	12.5×20	0.24	340	850
	33	16×20	0.24	500	1250
	47	16×20	0.24	580	1450
	68	16×25	0.24	690	1725
	82	18×25	0.24	770	1925
	100	18×25	0.24	920	2300
	120	18×30	0.24	980	2450
	150	18×35	0.24	1190	2975
400 (2G)	6.8	10×16	0.24	265	665
	10	10×20	0.24	340	850
	15	12.5×20	0.24	410	1025
	22	12.5×20	0.24	500	1250
	33	16×20	0.24	580	1450
	47	16×25	0.24	690	1725
	68	18×25	0.24	770	1925
	82	18×25	0.24	920	2300
	100	18×30	0.24	980	2450
	120	18×35	0.24	1190	2975
	150	18×40	0.24	1250	3125
450 (2W)	6.8	10×20	0.24	340	850
	10	12.5×20	0.24	410	1025
	15	12.5×25	0.24	500	1250
	22	16×20	0.24	580	1450
	47	16×25	0.24	770	1925
	68	18×30	0.24	920	2300
	82	18×35	0.24	980	2450
	100	18×40	0.24	1190	2975

●Taping, Cutting Products & other customized demands are available upon request.
●Please check with us about the specified actual demanding.