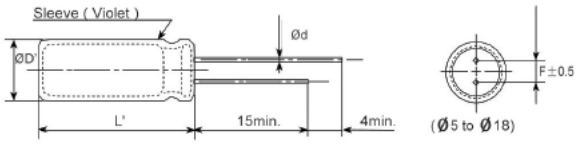
LGR Series

- Low impedance & Extremely Long life design
- Life time: +105°C 20000 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
	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 20000 hours at 105°C.										
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 20000 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	G	R	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 LGR 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	375
	330	6.3×11	0.13	0.41	590
	560	8×11.5	0.072	0.22	906
	820	8×16	0.056	0.17	1086
	1000	10×12.5	0.053	0.16	1344
	1200	10×16	0.038	0.12	1561
	1500	10×20	0.023	0.069	1987
	2200	10×25	0.022	0.066	2347
	3300	12.5×20	0.021	0.053	2577
	3900	12.5×25	0.018	0.045	3024
	4700	12.5×30	0.016	0.041	3429
	5600	16×20	0.018	0.045	3592
	6800	16×25	0.016	0.043	3777
10(1A)	100	5×11	0.30	1.00	491
	220	6.3×11	0.13	0.41	709
	470	8×11.5	0.072	0.22	1266
	680	10×12.5	0.053	0.16	1725
	1000	10×16	0.038	0.12	2139
	1200	10×20	0.023	0.069	2402
	1500	10×25	0.022	0.066	2751
	2200	12.5×20	0.021	0.053	3330
	3300	12.5×25	0.018	0.045	3494
	3900	12.5×30	0.016	0.041	3712
	4700	12.5×30	0.015	0.039	4215
	5600	16×25	0.016	0.043	4717
16(1C)	56	5×11	0.30	1.00	426
	120	6.3×11	0.13	0.41	600
	330	8×11.5	0.072	0.22	1191
	470	10×12.5	0.053	0.16	1451
	680	10×16	0.038	0.12	1998
	1000	10×20	0.023	0.069	2434
	1200	10×25	0.022	0.066	2567
	1500	12.5×20	0.021	0.053	2904
	2200	12.5×25	0.018	0.045	3134
	2700	12.5×30	0.016	0.041	3921
	3300	12.5×30	0.015	0.039	4215
	3900	16×25	0.016	0.043	4717
	4700	16×25	0.015	0.041	4826
	6800	16×25	0.014	0.049	5001
25(1E)	47	5×11	0.30	1.00	491
	100	6.3×11	0.13	0.41	764
	220	8×11.5	0.072	0.22	1310
	330	10×12.5	0.053	0.16	1768
	470	10×16	0.038	0.12	1998
	680	10×20	0.023	0.069	2532
	820	10×25	0.022	0.066	2904
	1000	12.5×20	0.021	0.053	3003
	1500	12.5×25	0.018	0.045	3133
	1800	12.5×30	0.016	0.041	3701
	2200	16×25	0.015	0.040	4214
	2700	16×25	0.015	0.039	4291
	3300	16×35	0.014	0.039	4760
	3900	18×35	0.015	0.040	4825
	4700	18×40	0.014	0.037	4968

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	491
	56	6.3×11	0.13	0.41	693
	150	8×11.5	0.072	0.22	1375
	220	10×12.5	0.053	0.16	1888
	330	10×16	0.038	0.12	2325
	470	10×20	0.023	0.069	2860
	560	10×25	0.022	0.066	3112
	680	10×20	0.021	0.053	3330
	1000	12.5×25	0.018	0.045	3504
	1200	12.5×30	0.016	0.041	3810
	1500	16×25	0.016	0.039	4160
	1800	16×25	0.016	0.043	4716
	2200	16×35	0.015	0.039	4859
	2700	18×35	0.016	0.041	5098
	3300	18×40	0.015	0.039	5230
50(1H)	22	5×11	0.34	1.18	491
	56	6.3×11	0.14	0.50	802
	100	8×11.5	0.074	0.22	1549
	120	8×11.5	0.061	0.18	1943
	150	10×12.5	0.061	0.18	2063
	180	10×12.5	0.046	0.14	2358
	220	10×16	0.042	0.12	2587
	270	10×20	0.030	0.090	2675
	330	10×25	0.028	0.085	2914
	470	12.5×20	0.027	0.068	3112
	680	12.5×30	0.021	0.052	3231
	820	16×20	0.023	0.059	3679
	1000	16×25	0.021	0.056	4286
	2200	18×30	0.019	0.054	5061
	3300	18×30	0.019	0.054	5453
	3900	22×40	0018	0.052	5773
	4700	22×40	0.018	0.052	5916
63(1J)	15	5×11	0.88	3.5	398
	33	6.3×11	0.35	1.4	430
	56	8×11.5	0.22	0.88	676
	82	10×12.5	0.11	0.44	1080
	120	10×16	0.076	0.31	1458
	180	10×20	0.056	0.23	1692
	220	10×25	0.046	0.19	1822
	270	12.5×20	0.041	0.13	1965
	390	12.5×25	0.031	0.093	2500
	470	12.5×30	0.028	0.084	2795
	560	16×25	0.023	0.072	2981
	680	16×25	0.025	0.075	3116
	820	16×30	0.021	0.063	3428
	1000	16×35	0.019	0.057	3603
	1200	16×40	0.018	0.054	3800
	1500	18×35	0.018	0.054	3931
	1800	18×40	0.017	0.051	4247
	2200	18×40	0.017	0.050	4422
	2700	18×40	0.017	0.050	4651
	3300	22×35	0.016	0.049	4825
	3900	22×40	0.015	0.048	4924
	4700	22×40	0.015	0.048	5765

◆ Standard Rating of LGR 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	1080
	100	10×16	0.11	0.47	1298
	120	10×20	0.084	0.34	1474
	150	10×25	0.069	0.28	1713
	220	12.5×20	0.062	0.18	2041
	330	12.5×25	0.047	0.14	2412
	390	12.5×30	0.042	0.13	2641
	470	16×25	0.038	0.12	3035
	560	16×30	0.032	0.095	3341
	680	16×30	0.032	0.095	3406
	820	16×35	0.029	0.086	3603
	1000	18×35	0.027	0.081	3767
	1200	18×40	0.026	0.077	4127
	1500	18×40	0.026	0.076	4269
	1800	18×45	0.025	0.075	4564
	2200	18×45	0.025	0.075	4641
	2700	22×25	0.023	0.073	4728
	3300	22×30	0.023	0.073	4860
	3900	22×40	0.022	0.073	5448

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	474
	15	6.3×11	0.57	2.3	556
	27	8×11.5	0.36	1.4	709
	39	10×12.5	0.25	1.0	894
	47	10×12.5	0.17	0.66	1037
	56	10×16	0.17	0.66	1408
	68	10×16	0.11	0.47	1474
	82	10×20	0.084	0.34	1626
	100	12.5×20	0.084	0.34	1834
	120	12.5×20	0.069	0.28	1889
	150	12.5×20	0.062	0.18	2074
	220	12.5×25	0.047	0.14	2216
	270	12.5×30	0.042	0.13	2839
	330	16×25	0.038	0.12	3122
	390	16×30	0.032	0.095	3276
	470	18×25	0.032	0.095	3460
	560	18×30	0.030	0.090	3603
	680	18×35	0.027	0.081	4127
	820	18×40	0.026	0.077	4368

◆ Standard Rating of LGR 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	491
	22	10×20	0.20	230	628
	33	10×20	0.20	260	709
	47	10×20	0.20	320	873
	68	12.5×20	0.20	490	1337
	82	12.5×20	0.20	590	1613
	100	12.5×30	0.20	720	1965
	150	16×20	0.20	880	2402
	220	16×25	0.20	1220	3330
	330	18×30	0.20	1560	4258
200 (2D)	10	10×16	0.20	200	546
	22	10×20	0.20	280	764
	33	10×20	0.20	360	982
	47	12.5×20	0.20	450	1228
	68	12.5×20	0.20	565	1541
	82	16×20	0.20	630	1719
	100	16×20	0.20	725	1979
	150	16×25	0.20	970	2648
	220	18×30	0.20	1240	3078
	330	18×35	0.20	1645	4127
250 (2E)	10	10×20	0.20	230	628
	22	10×20	0.20	320	873
	33	12.5×20	0.20	420	1146
	47	12.5×20	0.20	520	1419
	68	16×20	0.20	650	1774
	82	16×20	0.20	730	1992
	100	16×25	0.20	840	2293
	150	18×30	0.20	1100	3003
	220	18×30	0.20	1390	3450

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	655
	10	10×20	0.24	265	725
	22	12.5×20	0.24	340	928
	33	16×20	0.24	500	1365
	47	16×20	0.24	580	1583
	68	16×25	0.24	690	1883
	82	18×25	0.24	770	2102
	100	18×25	0.24	920	2511
	120	18×30	0.24	980	2675
	150	18×35	0.24	1190	3248
400 (2G)	6.8	10×16	0.24	265	725
	10	10×20	0.24	340	928
	15	12.5×20	0.24	410	1119
	22	12.5×20	0.24	500	1365
	33	16×20	0.24	580	1583
	47	16×25	0.24	690	1883
	68	18×25	0.24	770	2102
	82	18×25	0.24	920	2511
	100	18×30	0.24	980	2675
	120	18×35	0.24	1190	3248
	150	18×40	0.24	1250	3412
450 (2W)	6.8	10×20	0.24	340	928
	10	12.5×20	0.24	410	1119
	15	12.5×25	0.24	500	1365
	22	16×20	0.24	580	1583
	47	16×25	0.24	770	2102
	68	18×30	0.24	920	2511
	82	18×35	0.24	980	2675
	100	18×40	0.24	1190	3248

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