

# Snap in capacitor

Liron®

## LRE series 105°C 12000 hours



- Rohs requirements .
- 105°C for 12000 hours,high ripple product.
- Used for industrial products such as power supply, servo, inverter and other industrial products

### Product description

Item	Characteristic		
Operating temperature range	-40°C~+105°C		-25°C~+105°C
Rated voltage(WV/V)	160V~450V		460V~550V
Capacitance(CAP/C)	100~3300		
Tolerance(CAP/C)	±20% (25°C, 120Hz)		
Leakage current LC/I(25°C, 120Hz)	LC≤0.01CV(uA) or 1.5mA, take the smaller (25°C, 5 minutes) C=Nominal capacitance(μF),V=Working voltage(V)		
Dissipation factor DF/tanδ(25°C, 120Hz)	UR(V)	160~450	460~550
	DF	0.15	0.15
Temperature characteristics (Impedance ratio at 120Hz)	UR(V)	160~450	460~550
	Z(-25°C/Z(+25°C))	4	10
	Z(-40°C/Z(+25°C))	8	-
Temperature characteristics (Capacitance ratio at 120Hz)	C(-40°C/C(+25°C))≥0.6		
	C(-25°C/C(+25°C))≥0.7		

	Working lifetime		Standard lifetime	Durability	High temperature storage
Load Time	14000h	>240000h	12000h	12000h	1000h
LC/I(25°C, 120Hz)	Within the rated specification value.		Within the rated specification value.	Within the rated specification value.	Within the rated specification value.
Capacitance change	Within ±30% of initial value		Within ±20% of initial value	Within ±20% of initial value	Within ±20% of initial value
Dissipation factor	Within 300% of rated specification value		Within 200% of rated specification value	Within 200% of rated specification value	Within 200% of rated specification value
Environmental condition: Applied voltage	UR	UR	UR	UR	UR=0
Applied current	IR	1.2×IR	IR	IR=0	IR=0
Application temperature	105°C	40°C	105°C	105°C	105°C

Apply rated working voltage for 30 minutes, and test after recovery for 24 hours:

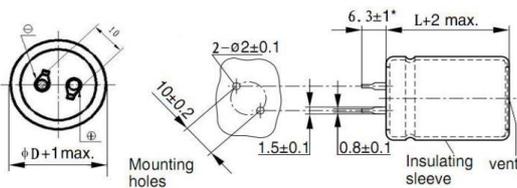
### Ripple current correction factor

Temperature °C	40	55	85	105	Frequency	50/60Hz	120Hz	1KHz	10KHz	≥50KHz
Coefficient	2.7	2.5	1.7	1.0	Coefficient	0.80	1.00	1.30	1.41	1.43

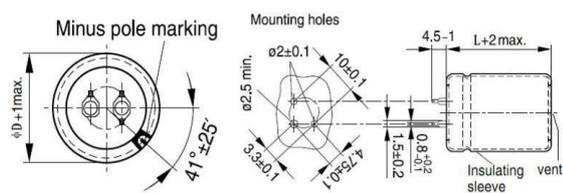
Aluminum electrolytic capacitors age as they heat up and temperature rises when ripple current is superimposed. Using at higher temperatures will reduce product life. To maintain product life, please reduce ripple current during use.

### Drawing unit: mm

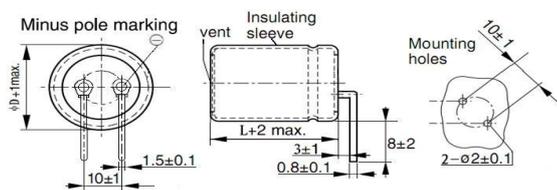
K-type (2 pins)



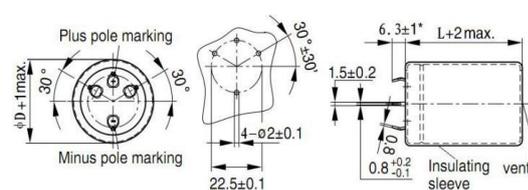
L-type (3 pins):



C-type (long pin-2 pins)



M-type (4 pins):



■LRE series:105°C 12000 hours,long lifetime,high ripple snap-in capacitor.

WV (V.DC)	CAP 25°C, 120Hz (μF)	DF 25°C, 120Hz	Max ESR 25°C, 120Hz (mΩ)	ESR (typ.) 25°C, 120Hz (mΩ)	Rated Ripple Current 105°C, 120Hz (Arms)	Size ΦD×L (mm)	Code P/N	WV (V.DC)	CAP 25°C, 120Hz (μF)	DF 25°C, 120Hz	Max ESR 25°C, 120Hz (mΩ)	ESR (typ.) 25°C, 120Hz (mΩ)	Rated Ripple Current 105°C, 120Hz (Arms)	Size ΦD×L (mm)	Code P/N	
(V.DC)	(μF)		(mΩ)	(mΩ)	(Arms)	(mm)	-	(V.DC)	(μF)		(mΩ)	(mΩ)	(Arms)	(mm)	-	
160 2C (200)	470	0.15	423	254	1.5	25 x 40	LRE 2C471MQ040***	200 2D (250)	1500	0.15	133	80	3.3	30 x 70	LRE 2D152MR070***	
	560	0.15	355	213	1.7	25 x 50	LRE 2C561MQ050***			0.15	133	80	3.3	30 x 75	LRE 2D152MR075***	
	680	0.15	293	176	1.9	25 x 60	LRE 2C681MQ060***			0.15	133	80	3.4	35 x 60	LRE 2D152MS060***	
		0.15	293	176	1.8	30 x 50	LRE 2C681MR050***		1800	0.15	111	66	3.7	30 x 80	LRE 2D182MR080***	
	0.15	243	146	2.1	25 x 60	LRE 2C821MQ060***	0.15			111	66	3.8	35 x 60	LRE 2D182MS060***		
	0.15	243	146	2.1	30 x 50	LRE 2C821MR050***	0.15			111	66	3.8	35 x 70	LRE 2D182MS070***		
	1000	0.15	199	119	2.4	25 x 60	LRE 2C102MQ060***		2200	0.15	90	54	4.3	35 x 70	LRE 2D222MS070***	
		0.15	199	119	2.4	30 x 50	LRE 2C102MR050***			0.15	90	54	4.3	35 x 80	LRE 2D222MS080***	
		0.15	199	119	2.5	35 x 40	LRE 2C102MS040***			2700	0.15	74	44	4.9	35 x 80	LRE 2D272MS080***
	1200	0.15	166	100	2.8	25 x 60	LRE 2C122MQ060***		270	0.15	737	442	1.1	22 x 45	LRE2E271MP045***	
		0.15	166	100	2.8	30 x 50	LRE 2C122MR050***			330	0.15	603	362	1.3	22 x 50	LRE2E331MP050***
		0.15	166	100	2.8	35 x 40	LRE 2C122MS040***			390	0.15	510	306	1.4	22 x 55	LRE2E391MP055***
	1500	0.15	133	80	3.1	30 x 70	LRE 2C152MR070***		0.15		510	306	1.4	25 x 45	LRE2E391MQ045***	
		0.15	133	80	3.1	35 x 50	LRE 2C152MS050***		470	0.15	423	254	1.6	22 x 60	LRE2E471MP060***	
		0.15	133	80	3.2	35 x 60	LRE 2C152MS060***			0.15	423	254	1.6	25 x 50	LRE2E471MQ050***	
	1800	0.15	111	66	3.6	30 x 60	LRE 2C182MR060***		560	0.15	355	213	1.8	22 x 70	LRE2E561MP070***	
		0.15	111	66	3.6	30 x 70	LRE 2C182MR070***			0.15	355	213	1.8	25 x 60	LRE2E561MQ060***	
		0.15	111	66	3.5	35 x 50	LRE 2C182MS050***			0.15	355	213	1.8	30 x 35	LRE2E561MR035***	
	2200	0.15	90	54	4.1	30 x 70	LRE 2C222MR070***		680	0.15	293	176	2.0	25 x 60	LRE2E681MQ060***	
		0.15	90	54	4.1	30 x 80	LRE 2C222MR080***			0.15	293	176	2.1	30 x 50	LRE2E681MR050***	
		0.15	90	54	4.0	35 x 60	LRE 2C222MS060***			0.15	293	176	2.2	35 x 30	LRE2E681MS030***	
		0.15	90	54	4.0	35 x 65	LRE 2C222MS065***			820	0.15	243	146	2.3	25 x 65	LRE2E821MQ065***
	2700	0.15	74	44	4.6	35 x 65	LRE 2C272MS065***		0.15		243	146	2.4	30 x 50	LRE2E821MR050***	
		0.15	74	44	4.8	35 x 70	LRE 2C272MS070***		0.15		243	146	2.5	35 x 35	LRE2E821MS035***	
3300	0.15	60	36	5.4	35 x 80	LRE 2C332MS080***	1000	0.15	199	119	2.7	30 x 60	LRE2E102MR060***			
200 2D (250)	390	0.15	510	306	1.3	25 x 50	LRE 2D391MQ050***	2F (365)	1200	0.15	166	100	3.0	30 x 60	LRE2E122MR060***	
	470	0.15	423	254	1.5	25 x 50	LRE 2D471MQ050***			0.15	166	100	3.0	35 x 40	LRE2E122MS040***	
	560	0.15	355	213	1.7	25 x 60	LRE 2D561MQ060***			0.15	166	100	3.2	35 x 50	LRE2E122MS050***	
		0.15	355	213	1.6	30 x 40	LRE 2D561MR040***		1500	0.15	133	80	3.6	35 x 60	LRE2E152MS060***	
	680	0.15	293	176	1.9	25 x 60	LRE 2D681MQ060***		1800	0.15	111	66	4.0	35 x 70	LRE2E182MS070***	
		0.15	293	176	1.9	30 x 50	LRE 2D681MR050***		180	0.15	1106	663	1.0	22 x 50	LRE2F181MP050***	
		0.15	293	176	1.9	35 x 40	LRE 2D681MS040***			220	0.15	905	543	1.1	22 x 50	LRE2F221MP050***
	820	0.15	243	146	2.2	25 x 60	LRE 2D821MQ060***			270	0.15	737	442	1.2	22 x 60	LRE2F271MP060***
		0.15	243	146	2.2	30 x 50	LRE 2D821MR050***		0.15	737	442	1.2	25 x 50	LRE2F271MQ050***		
	1000	0.15	199	119	2.5	30 x 60	LRE 2D102MR060***		330	0.15	603	362	1.4	25 x 50	LRE2F331MQ050***	
		0.15	199	119	2.5	30 x 65	LRE 2D102MR065***			390	0.15	510	306	1.6	25 x 60	LRE2F391MQ060***
		0.15	199	119	2.7	35 x 40	LRE 2D102MS040***				0.15	510	306	1.6	30 x 50	LRE2F391MR050***
		0.15	199	119	2.7	35 x 45	LRE 2D102MS045***				0.15	510	306	1.6	35 x 40	LRE2F391MS040***
	1200	0.15	166	100	2.7	30 x 60	LRE 2D122MR060***		470	0.15	423	254	1.8	25 x 60	LRE2F471MQ060***	
		0.15	166	100	2.8	30 x 65	LRE 2D122MR065***			0.15	423	254	1.8	30 x 50	LRE2F471MR050***	
		0.15	166	100	2.8	35 x 40	LRE 2D122MS040***			0.15	423	254	1.8	35 x 35	LRE2F471MS035***	
		0.15	166	100	3.0	35 x 45	LRE 2D122MS045***			0.15	603	362	1.4	35 x 40	LRE2F471MS040***	



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WV (V.DC)	CAP 25°C, 120Hz (μF)	DF 25°C, 120Hz	Max ESR 25°C, 120Hz (mΩ)	ESR (typ.) 25°C, 120Hz (mΩ)	Rated Ripple Current 105°C, 120Hz (Arms)	Size ΦD×L (mm)	Code P/N	WV (V.DC)	CAP 25°C, 120Hz (μF)	DF 25°C, 120Hz	Max ESR 25°C, 120Hz (mΩ)	ESR (typ.) 25°C, 120Hz (mΩ)	Rated Ripple Current 105°C, 120Hz (Arms)	Size ΦD×L (mm)	Code P/N		
(V.DC)	(μF)		(mΩ)	(mΩ)	(Arms)	(mm)	-	(V.DC)	(μF)		(mΩ)	(mΩ)	(Arms)	(mm)	-		
420 2X (470)	390	0.15	510	289	1.7	30 x 50	LRE 2X391MR050***	500 2H (550)	100	0.15	2654	1062	0.8	25 x 50	LRE 2H101MQ050***		
		0.15	510	289	1.7	35 x 40	LRE 2X391MS040***		120	0.15	2212	885	0.9	25 x 60	LRE 2H121MQ060***		
		0.15	510	289	1.7	35 x 45	LRE 2X391MS045***			0.15	2212	885	0.9	30 x 40	LRE 2H121MR040***		
	470	0.15	423	240	1.9	30 x 60	LRE 2X471MR060***		150	0.15	2212	708	1.0	30 x 40	LRE 2H151MR040***		
		0.15	423	240	2.0	35 x 50	LRE 2X471MS050***		180	0.15	1474	590	1.2	30 x 50	LRE 2H181MR050***		
	560	0.15	355	201	2.2	35 x 50	LRE 2X561MS050***		220	0.15	1206	483	1	25 x 70	LRE 2H221MQ070***		
	680	0.15	293	166	2.5	35 x 60	LRE 2X681MS060***			0.15	1206	483	1.3	30 x 50	LRE 2H221MR050***		
	820	0.15	243	138	3.0	35 x 70	LRE 2X821MS070***			0.15	1206	483	1.2	35 x 40	LRE 2H221MS040***		
	1000	0.15	199	113	3.4	35 x 90	LRE 2X102MS090***		270	0.15	983	393	1.5	30 x 60	LRE 2H271MR060***		
	1200	0.15	166	94	3.8	35 x 100	LRE 2X122MS100***			0.15	983	393	1.5	35 x 50	LRE 2H271MS050***		
450 2W (500)	120	0.15	2212	885	0.8	22 x 50	LRE 2W121MP050***	330	0.15	804	322	1.6	35 x 50	LRE 2H331MS050***			
		0.15	2212	885	0.8	22 x 55	LRE 2W121MP055***	390	0.15	680	272	1.8	35 x 60	LRE 2H391MS060***			
		0.15	2212	885	0.8	25 x 45	LRE 2W121MQ045***	470	0.15	565	226	2.0	35 x 60	LRE 2H471MS060***			
	150	0.15	1769	708	0.9	22 x 60	LRE 2W151MP060***		0.15	565	226	2.0	35 x 70	LRE 2H471MS070***			
		0.15	1769	708	0.9	25 x 50	LRE 2W151MQ050***	560	0.15	474	190	2.2	35 x 70	LRE 2H561MS070***			
	180	0.15	1474	590	1.1	25 x 60	LRE 2W181MQ060***		0.15	474	190	2.2	40 x 60	LRE 2H561MB060***			
		0.15	1474	590	1.1	30 x 50	LRE 2W181MR050***	680	0.15	390	156	2.4	35 x 80	LRE 2H681MS080***			
		0.15	1474	590	1.1	35 x 35	LRE 2W181MS035***		0.15	390	156	2.4	40 x 70	LRE 2H681MB070***			
	220	0.15	1206	483	1.2	25 x 60	LRE 2W221MQ060***	820	0.15	324	129	2.6	35 x 100	LRE 2H821MS100***			
		0.15	1206	483	1.2	30 x 50	LRE 2W221MR050***		0.15	324	129	2.6	40 x 80	LRE 2H821MB080***			
		0.15	1206	483	1.2	35 x 35	LRE 2W221MS035***	1000	0.15	265	106	2.8	40 x 100	LRE 2H102MB100***			
	270	0.15	983	393	1.3	25 x 65	LRE 2W271MQ065***		0.15	265	106	2.8	45 x 80	LRE 2H102MV080***			
		0.15	983	393	1.3	30 x 50	LRE 2W271MR050***	1200	0.15	128	88	3.2	45 x 90	LRE 2H122MV090***			
		0.15	983	393	1.4	35 x 40	LRE 2W271MS040***	1500	0.15	128	68	3.6	45 x 110	LRE 2H152MV110***			
	450 2W (500)	330	0.15	804	322	1.5	35 x 40	LRE 2W331MS040***	550 2Y (600)	180	0.15	2108	881	0.8	35 x 40	LRE2Y181MS040***	
			390	0.15	680	272	1.7	30 x 60		LRE 2W391MR060***	220	0.15	1750	698	1.1	35 x 50	LRE2Y221MS050***
				0.15	680	272	1.7	35 x 40		LRE 2W391MS040***	270	0.15	1229	590	1.3	35 x 60	LRE2Y271MS060***
		0.15		680	272	1.7	35 x 45	LRE 2W391MS045***		330	0.15	1005	483	1.4	35 x 70	LRE2Y331MS070***	
		470	0.15	565	226	2.0	30 x 70	LRE 2W471MR070***		390	0.15	851	408	1.6	35 x 70	LRE2Y391MS070***	
			0.15	565	226	2.0	35 x 55	LRE 2W471MS055***		470	0.15	706	339	1.8	35 x 80	LRE2Y471MS080***	
			0.15	565	226	2.0	35 x 60	LRE 2W471MS060***			0.15	706	339	1.8	40 x 70	LRE2Y471MB070***	
		560	0.15	474	190	2.2	35 x 70	LRE 2W561MS070***		560	0.15	592	284	2.0	35 x 90	LRE2Y561MS090***	
		680	0.15	390	156	2.6	35 x 80	LRE 2W681MS080***			0.15	592	284	2.0	40 x 80	LRE2Y561MB080***	
			0.15	390	156	2.6	35 x 90	LRE 2W681MS090***		680	0.15	488	234	2.3	40 x 90	LRE2Y681MB090***	
		820	0.15	324	129	3.0	35 x 90	LRE 2W821MS090***			0.15	488	234	2.3	45 x 80	LRE2Y681MV080***	
		1000	0.15	265	106	3.4	35 x 100	LRE 2W102MS100***		820	0.15	320	189	2.6	40 x 100	LRE2Y821MB100***	
	0.15		265	106	3.4	40 x 80	LRE 2W102MB080***	0.15	320		189	2.6	45 x 90	LRE2Y821MV090***			
	1200	0.15	221	88	3.7	35 x 110	LRE 2W122MS110***	1000	0.15	280	161	2.9	40 x 100	LRE2Y102MB100***			
		0.15	221	88	3.7	40 x 90	LRE 2W122MB090***		0.15	280	161	2.9	45 x 90	LRE2Y102MV090***			

\*\*\* Indicates product mounting method, terminal diameter, and thread size;

If you need to know more about product specifications, sizes and other relevant data, if not fully listed, you can contact through phone, wechat and other tools to understand.

The content recorded in the catalog book may be changed without prior notice. Please request our company to provide a specification book when purchasing or using it, and use it based on it.

LRE2Y181MS040\*\*\*  
LRE2Y221MS050\*\*\*  
LRE2Y271MS060\*\*\*  
LRE2Y331MS070\*\*\*  
LRE2Y391MS070\*\*\*  
LRE2Y471MS080\*\*\*  
LRE2Y471MB070\*\*\*  
LRE2Y561MS090\*\*\*  
LRE2Y561MB080\*\*\*  
LRE2Y681MB090\*\*\*  
LRE2Y681MV080\*\*\*  
LRE2Y821MB100\*\*\*  
LRE2Y821MV090\*\*\*  
LRE2Y102MB100\*\*\*  
LRE2Y102MV090\*\*\*