

FEATURES

- Directly mountable on printed circuit board without holders.
- Smaller low profile size than ordinary capacitors.
- Terminal spacing fixed at 10mm for PC board plug in.
- Aluminum case designed explosion-proof vent.

PART NUMBERING

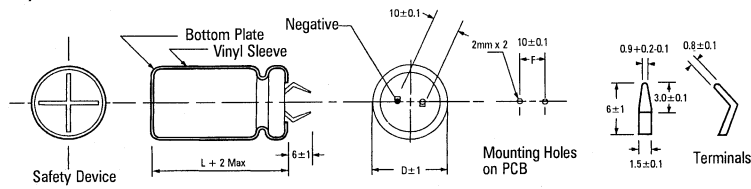
Part Number Example: LC-050/103M30X41F							
LC	-	050	/	103	M	30X41	F
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	RoHs Compliant
* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).							

SPECIFICATIONS

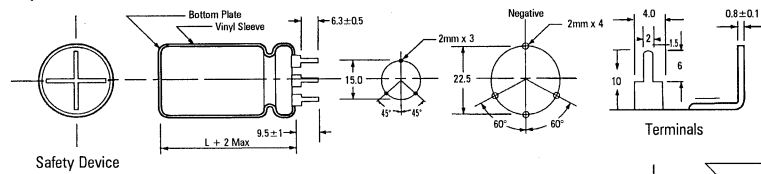
Performance Characteristics							
Operating Temperature Range	-40°C ~ +85°C.			-25°C ~ +85°C.			
Temperature Characteristics (120Hz)	Impedance Ratio						
	Z (-25°C) / Z (+20°C)			3 maximum			
	Z (-40°C) / Z (+20°C)			12 maximum			
Voltage Range	10VDC ~ 100VDC.			160VDC ~ 450VDC.			
Capacitance Range	470μF ~ 68000μF.			47μF ~ 2700μF.			
Capacitance Tolerance (20°C, 120Hz)	±20%.						
Maximum Dissipation Factor % (20°C, 120Hz)	Less than the value under table.						
	μF	Rated Voltage (WVDC)					
		10 ~ 16	25 ~ 35	50 ~ 63	80 ~ 100	160 ~ 250	315 ~ 450
	47 ~ 390				15	20	
	470 ~ 3900	25	20	20	20	15	20
	4700 ~ 8200	35	30	30	25		
	10000 ~ 22000	40	35	30			
27000 ~ 47000	45	40	35				
56000 ~ 68000	50	45					
Maximum Leakage Current (20°C) (after 5 minutes)	0.02CV.						
Load Life Test	Test Conditions						
	Duration Time			2000 hours.			
	Ambient Temperature			85°C.			
	Applied Voltage			Rated DC working voltage.			
	After test requirements @ 20°C						
	Capacitance Change			Within ±20% of the initial measured value.			
	Dissipation Factor			200% of the initial specified value.			
Leakage Current			The initial specified value.				
Shelf Life	Test Conditions						
	Duration Time			500 hours.			
	Ambient Temperature			85°C.			
	Applied Voltage			None.			
	After test requirements @ 20°C: Same limits as load life.						
	Pre-treatment for measurements shall be conducted after applications of DC working voltage for 30 minutes.						

DIAGRAM OF DIMENSIONS (CASE VENT)(UNIT: mm)

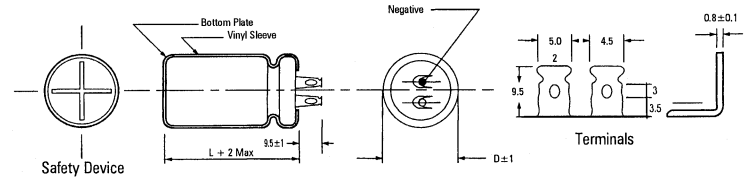
Symbol W: PCB Terminal (Snap-In)



Symbol G: PCB Terminal



Symbol V:
Lug Terminal



Frequency	Multiplying Factor		
	10V ~ 35V	50V ~ 100V	160V ~ 250V
60Hz	0.90	0.90	0.80
120Hz	1.00	1.00	1.00
1KHz	1.05	1.15	1.35
10KHz	1.10	1.20	1.45
100KHz	1.10	1.20	1.50

Ambient Temperature	Multiplying Factor
45°C & under	1.55
60°C	1.30
70°C	1.20
85°C	1.00

CASE SIZE AND RIPPLE CURRENT (UNIT A, rms, 120Hz @ 85°C)

WV DC	µF	Case Size ØD x L (mm)	Ir (A)	WV DC	µF	Case Size ØD x L (mm)	Ir (A)	WV DC	µF	Case Size ØD x L (mm)	Ir (A)	WV DC	µF	Case Size ØD x L (mm)	Ir (A)
10	4700	22 x 21	2.40	25	4700	22 x 26	2.64	50	1500	22 x 26	1.44	80	680	22 x 21	1.34
	6800	22 x 26	2.84		5600	22 x 31	2.78		2200	22 x 26	2.04		1000	22 x 26	1.62
	8200	22 x 26	2.90		6800	22 x 31	2.93		2700	22 x 31	2.30		1500	22 x 31	1.76
	10000	22 x 31	3.06			8200			22 x 31	3.05	3300			22 x 31	
		25 x 26			10000		25 x 26		3.43				4700	25 x 31	2.88
	12000	22 x 31	3.43			10000	22 x 36			3.43	5600			30 x 31	
		25 x 26			12000		25 x 31		3.84				6800	30 x 26	3.24
	15000	22 x 36	3.94			12000	22 x 41			3.84	8200			22 x 41	
		25 x 31			15000		25 x 36		4.39				10000	25 x 41	3.96
	18000	22 x 41	4.34			15000	22 x 51			4.39	12000			30 x 31	
		25 x 31			18000		25 x 41		4.80				15000	30 x 36	4.70
	22000	22 x 46	4.80			18000	25 x 46			4.80	18000			30 x 36	
		25 x 36			22000		30 x 31		5.40				22000	25 x 51	5.85
	27000	25 x 46	7.57			22000	30 x 41			5.40	27000			30 x 41	
		30 x 36			33000		30 x 46		5.97				33000	35 x 36	4.70
	33000	25 x 51	8.20			33000	30 x 51			6.24	39000			30 x 51	
		30 x 41			39000		35 x 47		7.10				47000	35 x 42	5.85
	39000	30 x 46	8.33			39000	35 x 47			7.10	47000			35 x 47	
		35 x 36			47000		35 x 52		7.60				68000	35 x 52	5.85
	47000	30 x 51	8.96			47000	35 x 52			7.60	68000			35 x 52	
56000	35 x 46	10.5		68000	35 x 52		7.60	68000	35 x 52			5.85	22000	35 x 52	5.04
68000	35 x 52		10.8		68000	35 x 52			7.60	68000	35 x 52			5.85	
16	4700	22 x 21		2.40		35	2200	22 x 26			2.18	63	1000		22 x 26
	6800	22 x 26	2.84	3300	22 x 26		2.46	1500	22 x 26	1.68	680		22 x 26	1.53	
	8200	22 x 26	2.90	3900	22 x 31		2.64	2200	22 x 31	2.52	1000		22 x 31	1.62	
	10000	22 x 31	3.06		4700				22 x 31				2.68		2700
		25 x 26		6800			22 x 36	3.06	3300	25 x 31	3.12			1500	
	12000	22 x 31	3.43		6800		25 x 31			3.06			3900		22 x 41
		25 x 26		10000			22 x 46	3.60	4700		25 x 31			3.28	2200
	15000	22 x 36	3.94		10000		25 x 41			3.60	5600		30 x 26		
		25 x 31		12000			30 x 31	4.08	6800				22 x 41	4.32	3300
	18000	22 x 41	4.34		12000		25 x 46			4.08	8200		25 x 41		
		25 x 31		15000			30 x 36	4.80	10000				25 x 46	4.70	4700
	22000	22 x 46	4.80		15000		35 x 32			4.80	12000		30 x 31		
		25 x 36		18000			25 x 51	3.92	15000				35 x 27	5.31	6800
	27000	25 x 46	7.57		18000		30 x 41			3.92	18000		35 x 27		
		30 x 36		33000			30 x 46	4.70	22000				35 x 32	6.24	10000
	33000	25 x 51	8.20		22000		35 x 37			5.45	27000		35 x 32		
		30 x 41		39000			30 x 51	5.45	33000				35 x 42	7.10	15000
	39000	30 x 46	8.33		33000		35 x 42			5.97	39000		35 x 42		
		35 x 36		47000			35 x 47	6.36	47000				35 x 47	6.80	22000
	47000	30 x 51	8.96		47000		35 x 47			6.36	68000		35 x 47		
56000	35 x 46	10.5		68000		35 x 47	6.36	68000	35 x 47			7.10	33000	35 x 47	4.10
68000	35 x 52		10.8		68000	35 x 47			6.36	68000	35 x 47			7.10	
10000	22 x 31	3.06		10000		22 x 36	3.43	10000			22 x 36	3.43	10000		22 x 36
	25 x 26		12000		25 x 26	3.43			12000	25 x 26	3.43			12000	25 x 26
12000	22 x 31	3.43		12000	22 x 41		3.84	12000		22 x 41		3.84	12000		22 x 41
15000	22 x 36		3.94		12000	25 x 31			4.39	12000	25 x 31			4.39	12000
18000	25 x 31	4.34		12000		25 x 41	4.80	12000			25 x 41	4.80	12000		
22000	25 x 36		4.80		12000	30 x 31			5.40	12000	30 x 31			5.40	12000
27000	30 x 36	7.57		12000		30 x 41	5.97	12000			30 x 41	5.97	12000		
33000	35 x 32		8.20		12000	30 x 51			6.24	12000	30 x 51			6.24	12000
39000	35 x 36	8.33		12000		35 x 42	7.10	12000			35 x 42	7.10	12000		
47000	35 x 42		8.96		12000	35 x 47			7.60	12000	35 x 47			7.60	12000
56000	35 x 46	10.5		12000		35 x 52	7.60	12000			35 x 52	7.60	12000		
68000	35 x 52		10.8		12000	35 x 52			7.60	12000	35 x 52			7.60	12000

CASE SIZE AND RIPPLE CURRENT: (UNIT A, rms, 120Hz @ 85°C) [CONT.]

WV DC	µF	Case Size ØD x L (mm)	I _r (A)	WV DC	µF	Case Size ØD x L (mm)	I _r (A)	WV DC	µF	Case Size ØD x L (mm)	I _r (A)	WV DC	µF	Case Size ØD x L (mm)	I _r (A)					
160	180	22 x 21	1.12	200	680	22 x 46	2.98	250	680	35 x 32	3.11	400	47	22 x 21	1.12					
	270	22 x 26	1.35			25 x 36				2.98	30 x 46		3.55	68	22 x 26	1.35				
	330	22 x 26	1.44			30 x 31				2.98	35 x 37		3.55	82	22 x 26	1.44				
	390	22 x 31	1.62			820	25 x 46			3.26	1000		30 x 51	4.00	100	22 x 31	1.66	120	22 x 31	1.76
		25 x 26					30 x 36						3.26	35 x 42		4.00			25 x 26	
	470	22 x 31	1.76				25 x 51				35 x 27		3.92	1200	35 x 47	4.55	150	22 x 36	2.03	150
		25 x 26			25 x 51				3.92	25 x 31					0.99	25 x 31		2.03		
	560	22 x 36	2.03		30 x 41		35 x 32		4.25	1500	30 x 26		0.99	180	22 x 41	2.36		180		
		30 x 26									30 x 46		4.25		25 x 36		1.15		25 x 36	2.36
		680			22 x 41	2.36	35 x 37		30 x 51	4.99	1800		30 x 27	1.15	220	22 x 46	1.75	220	22 x 51	1.75
	25 x 36		35 x 47		5.84								25 x 41	1.34		25 x 41			1.75	
	820		25 x 41		2.72		35 x 52		35 x 42	5.84	2200		35 x 27	1.34	270	25 x 46	1.96	270	25 x 46	1.96
		30 x 36	22 x 21			0.85							30 x 36	1.63		35 x 32			1.96	
		1000	25 x 46			3.13	22 x 26		22 x 31	1.36	270		25 x 26	1.60	330	30 x 36	2.26	330	30 x 41	2.26
	30 x 36		22 x 26		0.98								25 x 51	1.80		35 x 37			2.26	
	1200		30 x 36		3.44		22 x 31		25 x 26	1.60	330		30 x 41	1.80	390	30 x 36	2.50	390	30 x 36	2.50
		35 x 32	22 x 36			1.87							35 x 42	2.02		35 x 42			2.50	
		1500	30 x 46			3.96	25 x 31		30 x 26	2.04	390		30 x 37	2.02	470	35 x 47	2.80	470	35 x 47	2.80
	35 x 37		22 x 41		2.38								30 x 51	2.22		35 x 52			3.16	
	1800		30 x 51		4.47		22 x 41		25 x 36	3.11	560		35 x 42	2.22	560	35 x 52	3.16	560	35 x 52	3.16
		35 x 42	22 x 46			2.38							35 x 47	2.59		40 x 42			3.2	
		2200	35 x 47			4.65	30 x 26		3.11	680	35 x 52		2.90	680	35 x 52	2.90	680	35 x 52	2.90	
	200	150	22 x 21		0.96	250	470		25 x 41	2.38	350		470	30 x 41	2.22	450	150	35 x 42	1.39	
		220	22 x 26		1.14				30 x 31					2.38			30 x 46	1.39		150
270		22 x 26	1.36	25 x 46	2.81			35 x 37	1.76	220		35 x 52		1.76						
330		22 x 31	1.89	30 x 36				2.81	35 x 27	1.92		330			35 x 47		1.92			
		25 x 26		25 x 51	3.11		35 x 42	2.44												
470		22 x 36	2.23	30 x 41			3.11	40 x 42	2.5	390		35 x 42	2.44							
		25 x 31		40 x 52	3.2															

