

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

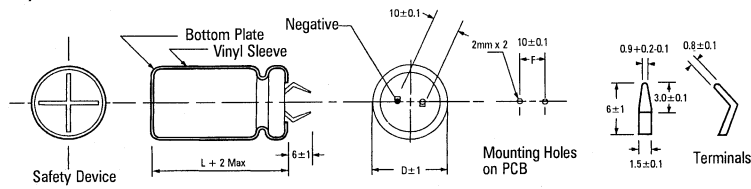
Part Number Example: LC-050/103M30X41F							
LC	-	050	/	103	M	30X41	F
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	RoHs Compliant
* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).							

SPECIFICATIONS

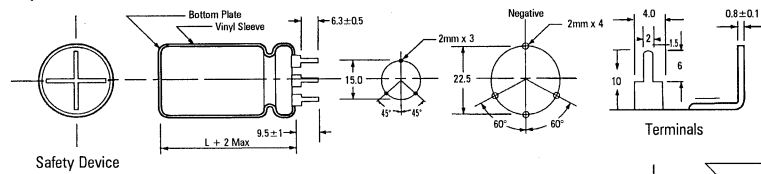
Performance Characteristics							
Operating Temperature Range	-40°C ~ +85°C.			-25°C ~ +85°C.			
Temperature Characteristics (120Hz)	Impedance Ratio						
	Z (-25°C) / Z (+20°C)			3 maximum			
	Z (-40°C) / Z (+20°C)			12 maximum			
Voltage Range	10VDC ~ 100VDC.			160VDC ~ 450VDC.			
Capacitance Range	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)

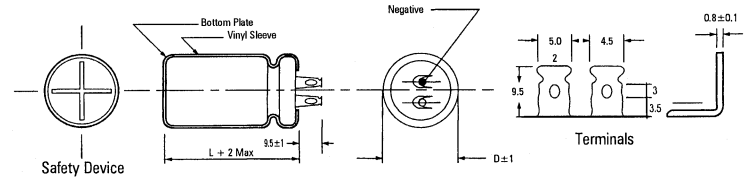
Symbol W: PCB Terminal (Snap-In)



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			25 x 26			3300	22 x 31	2.64			25 x 26		1800
		25 x 26			8200	22 x 31	3.05			30 x 31			25 x 31	2.88		
	12000	22 x 31	3.43		10000	22 x 36	3.43		4700	30 x 26	2200		22 x 41	2.52		
		25 x 26				25 x 31				30 x 26			25 x 31		30 x 26	
	15000	22 x 36	3.94		12000	22 x 41	3.84		5600	22 x 41	2700		22 x 46	2.76		
		25 x 31				25 x 36				30 x 31			25 x 36		30 x 31	
	18000	22 x 41	4.34			25 x 36			15000	22 x 51	6800		22 x 51	3300	22 x 51	3.24
		25 x 31				25 x 41				30 x 31			25 x 41		30 x 31	
	22000	22 x 46	4.80		30 x 31	18000	25 x 46		8200	25 x 46	3900		25 x 46	3.40		
		30 x 31			30 x 36		30 x 36			30 x 36			30 x 36			
	27000	25 x 46	7.57		22000	25 x 51	5.40		10000	25 x 51	4700		25 x 51	3.60		
		30 x 36				30 x 41				35 x 32			30 x 41		30 x 41	
	33000	25 x 51	8.20		27000	30 x 46	5.97		12000	30 x 46	5600		30 x 46	3.78		
		30 x 41				30 x 46				35 x 37			35 x 37		35 x 37	
	39000	30 x 46	8.33		33000	35 x 36	6.24		15000	30 x 51	6800		30 x 51	4.60		
		35 x 36				35 x 42				35 x 42			35 x 42		35 x 42	
	47000	30 x 51	8.96		39000	35 x 47	7.10		18000	35 x 47	5.31		8200	35 x 52	4.92	
56000	35 x 46	10.5	47000	35 x 52	7.60	22000	35 x 52	5.85	10000	40 x 56	5.04					
68000	35 x 52	10.8														
16	4700	22 x 21	2.40	35	2200	22 x 26	2.18	63	1000	22 x 26	1.58	100	470	22 x 21	1.34	
	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			25 x 26				4700				22 x 31		2.68
		25 x 26			6800	22 x 36	3.06		25 x 31		22 x 41		22 x 41			
	12000	22 x 31	3.43		10000	22 x 46	3.60		3300	22 x 41	1500		22 x 46	1.85		
		25 x 26				25 x 41				30 x 26			25 x 36		30 x 31	
	15000	22 x 36	3.94		12000	25 x 46	4.08		3900	22 x 46	1800		22 x 46	2.20		
		25 x 31				30 x 31				25 x 36			25 x 41		30 x 31	
	18000	22 x 41	4.34		15000	25 x 51	3.92		4700	25 x 41	2200		22 x 51	2.64		
		25 x 31				30 x 41				35 x 27			25 x 41		30 x 31	
	22000	22 x 46	4.80		18000	30 x 46	4.70		5600	25 x 46	2700		25 x 46	3.16		
		30 x 31				35 x 32				30 x 36			30 x 36		30 x 36	
	27000	25 x 46	7.57		22000	35 x 37	5.45		6800	35 x 32	3300		25 x 51	3.42		
		30 x 36				30 x 51				25 x 51			25 x 51		30 x 41	
	33000	25 x 51	8.20		27000	35 x 42	5.78		8200	30 x 41	3900		30 x 46	3.58		
		30 x 41				35 x 47				35 x 32			30 x 46		35 x 37	
	39000	30 x 46	8.33		33000	35 x 52	6.36		10000	35 x 32	4700		30 x 51	3.72		
		35 x 36								35 x 42			35 x 42		35 x 42	
	47000	30 x 51	8.96						12000	35 x 52	5.04		5600	35 x 47	3.72	
56000	35 x 46	10.5							6800	35 x 52	4.10					
68000	35 x 52	10.8														

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

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)				
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			820	30 x 46	3.55		68	22 x 26	1.35				
	330	22 x 26	1.44			30 x 31			35 x 37	82	22 x 26		1.44						
	390	22 x 31	1.62			25 x 46	1000		30 x 51	4.00	100		22 x 31	1.66					
		25 x 26				35 x 42			25 x 26										
	470	22 x 31	1.76			35 x 27	1200		35 x 47	4.55	120		22 x 31	1.76					
		25 x 26			35 x 52	25 x 26													
	560	22 x 36	2.03		25 x 51	1500	35 x 52	5.34	150	22 x 36	2.03								
		25 x 31			30 x 41		25 x 31												
		30 x 26			35 x 32		30 x 26												
	680	22 x 41	2.36		30 x 46	1800	35 x 47	5.84	180	22 x 41	2.36								
		25 x 36			35 x 37		25 x 36												
		30 x 26			30 x 51		30 x 27												
	820	22 x 46	2.72		35 x 42	1500	35 x 42	4.99	220	22 x 46	1.75								
		25 x 41			1800		35 x 47			25 x 41									
		30 x 36			2200		35 x 52			30 x 31									
	1000	25 x 46	3.13		22 x 21	120	22 x 21	0.85	270	25 x 46	1.96								
		30 x 36			150		22 x 26			30 x 36									
		35 x 32			180		22 x 26			35 x 32									
	1200	25 x 51	3.44		22 x 31	220	22 x 31	1.36	330	30 x 41	2.26								
		30 x 36			270		25 x 26			35 x 37									
		35 x 32			330		22 x 36			35 x 42									
	1500	30 x 46	3.96		25 x 31	330	25 x 31	1.87	390	30 x 36	2.50								
		35 x 37			30 x 26		35 x 37												
30 x 51		390		22 x 41	35 x 42														
1800	35 x 42	4.47	22 x 41	390	25 x 36	2.04	470	30 x 51	2.80										
	35 x 47		30 x 26		35 x 37														
	35 x 52		470		25 x 41			35 x 42											
200	150	22 x 21	0.96	250	470	25 x 41	2.38	350	680	35 x 52	2.90	450	150	35 x 42	1.39				
	220	22 x 26	1.14			30 x 31								30 x 46					
	270	22 x 26	1.36			25 x 46								35 x 42					
	330	22 x 31	1.89		30 x 36	560	30 x 36		2.81	220	35 x 52		1.76						
		25 x 26			35 x 27		35 x 37												
	470	22 x 36	2.23		25 x 51	680	30 x 41		3.11	330	35 x 47		1.92						
		25 x 31			25 x 51		35 x 42												
		30 x 26			30 x 41		35 x 47												
																	470	40 x 42	2.5
																	560	40 x 52	3.2

