

ML series

105°C 3000~5000時間品 高さ5mm~9mm
105°C 3000~5000hours. 5mm~9mm Height



◆規格表/SPECIFICATIONS

項目 Item	特性 Characteristics																					
カテゴリ温度範囲 Category Temperature Range	-40~+105°C																					
定格電圧範囲 Rated Voltage Range	6.3~50Vdc																					
静電容量許容差 Capacitance Tolerance	±20%(20°C, 120Hz)																					
漏れ電流 Leakage Current (MAX)	I=0.01CV又は3μAのいずれか大なる値以下(定格電圧印加2分後) I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage) I=漏れ電流(μA) C=静電容量(μF) V=定格電圧(Vdc) Leakage Current Capacitance Rated Voltage																					
損失角の正接(tan δ) Dissipation Factor (MAX)	<table border="1"> <thead> <tr> <th>定格電圧(Vdc) Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> </tr> </tbody> </table> (20°C, 120Hz)	定格電圧(Vdc) Rated Voltage	6.3	10	16	25	35	50	tan δ	0.40	0.35	0.30	0.25	0.20	0.20							
定格電圧(Vdc) Rated Voltage	6.3	10	16	25	35	50																
tan δ	0.40	0.35	0.30	0.25	0.20	0.20																
耐久性 Endurance	105°C中で右表の時間定格電圧(リップル重畳)印加後、下記項目を満足すること。 After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements. <table border="1"> <thead> <tr> <th>静電容量変化率 Capacitance Change</th> <th>初期値の±30%以内 Within ±30% of the initial value.</th> <th>ケースサイズ Case Size</th> <th>時間(hrs) Time(hrs)</th> </tr> </thead> <tbody> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の300%以下 Not more than 300% of the specified value.</td> <td>L=5mm</td> <td>3000</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> <td>L≥7mm</td> <td>5000</td> </tr> </tbody> </table>	静電容量変化率 Capacitance Change	初期値の±30%以内 Within ±30% of the initial value.	ケースサイズ Case Size	時間(hrs) Time(hrs)	損失角の正接 Dissipation Factor	規格値の300%以下 Not more than 300% of the specified value.	L=5mm	3000	漏れ電流 Leakage Current	規格値以下 Not more than the specified value.	L≥7mm	5000									
静電容量変化率 Capacitance Change	初期値の±30%以内 Within ±30% of the initial value.	ケースサイズ Case Size	時間(hrs) Time(hrs)																			
損失角の正接 Dissipation Factor	規格値の300%以下 Not more than 300% of the specified value.	L=5mm	3000																			
漏れ電流 Leakage Current	規格値以下 Not more than the specified value.	L≥7mm	5000																			
低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio (MAX)	<table border="1"> <thead> <tr> <th>定格電圧(Vdc) Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> </tr> </tbody> </table> (120Hz)	定格電圧(Vdc) Rated Voltage	6.3	10	16	25	35	50	Z(-25°C)/Z(+20°C)	6	4	4	3	2	2	Z(-40°C)/Z(+20°C)	12	10	8	6	4	4
定格電圧(Vdc) Rated Voltage	6.3	10	16	25	35	50																
Z(-25°C)/Z(+20°C)	6	4	4	3	2	2																
Z(-40°C)/Z(+20°C)	12	10	8	6	4	4																

◆呼称方法/PART NUMBER

□□□ ML □□□□□ M □□□ □□ D x L
 定格電圧 シリーズ名 静電容量 静電容量許容差 副記号 リード加工記号 ケースサイズ
 Rated Voltage Series Capacitance Capacitance Tolerance Option Lead Forming Case Size

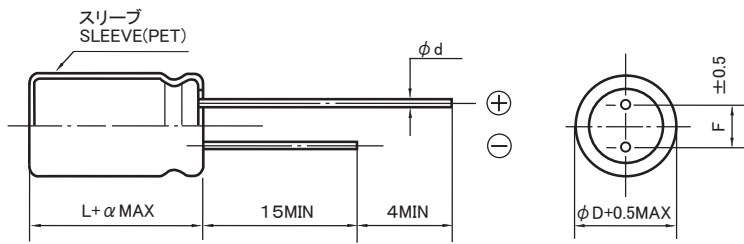
◆リップル電流補正係数/
MULTIPLIER FOR RIPPLE CURRENT

周波数(Hz) Frequency	60(50)	120	1k	10k	100k≤
1μF	0.50	1.00	1.20	1.30	1.50
2.2~6.8μF	0.65	1.00	1.20	1.30	1.50
10~82μF	0.80	1.00	1.20	1.30	1.50
100~1000μF	0.80	1.00	1.10	1.15	1.20

◆副記号/OPTION

EFC : PETスリーブ PET Sleeve

◆寸法図／DIMENSIONS



ϕD	4	5	6.3	8x5	8x7	8x7.5	8x9	10
ϕd	0.45							0.6
F	1.5	2.0	2.5		3.5		5.0	
α	35~100Vdc 160~450Vdc		L=7 : $\alpha = 1.0$ L=5 : $\alpha = 1.5$		1.5	1.0	2.0	

◆標準品一覧表／STANDARD SIZE

Size $\phi D \times L$ (mm), Rated Ripple Current (mA r.m.s./105°C, 120Hz)

定格電圧 (Vdc) 静電容量 (μF)	6.3		10		16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1											4x5	8
2.2											4x5	11
3.3											4x5	14
4.7											4x7	23
6.8									4x5	17	5x5	25
10							4x5	18	4x7	28	5x7	30
12									5x5	34	6.3x5	37
15							4x7	35				
18					4x5	20			5x7	48	6.3x7	50
22			4x5	22	4x7	40	5x5	42			8x5	62
27	4x5	25					5x7	57	6.3x5	58	6.3x7	62
33			4x7	43	5x5	45					8x7	75
39					5x7	65			6.3x7	76		
47	4x7	47	5x5	48			6.3x5	65	8x5	80		
56	5x5	50	5x7	68			6.3x7	85	8x7	105	8x7.5	115
68					6.3x5	70						
82	5x7	75					8x5	100			8x9	160
100			6.3x5	75	6.3x7	95	8x7	112	8x7.5	125		
120	6.3x5	80	6.3x7	100	8x5	110					10x9	315
150					8x7	125	8x7.5	140	8x9	180		
180	6.3x7	110	8x5	120								
220	8x5	125	8x7	160	8x7.5	170	8x9	190	10x9	360		
270	8x7	165										
330			8x7.5	180	8x9	195	10x9	450				
470	8x7.5	190	8x9	210	10x9	460						
560	8x9	230										
680			10x9	470								
1000	10x9	480										