

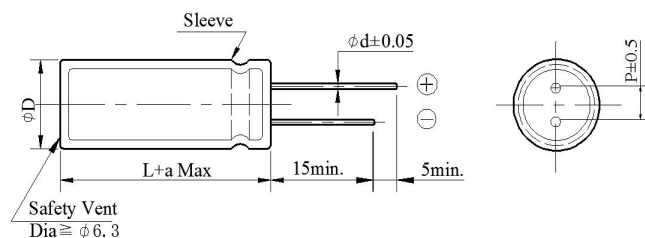
ME Series

- Fast charging of GaN.
- Load life 2,000 hours at 105°C.
- RoHS, REACH Compliant.

◆ SPECIFICATIONS

Item	Performance Characteristics					
Category Temperature Range	-40 ~ +105°C					
Working Voltage Range	160 ~ 550Vdc					
Capacitance Range	1 ~ 22,000 μF					
Capacitance Tolerance	±20% (at 20°C and 120Hz)					
Dissipation Factor (tan δ) (at 20°C, 120Hz)	Rated Voltage (V)	160 ~ 250	400 ~ 550			
	tan δ (Max)	0.15	0.20			
The above values should be increased by 0.02 for every additional 1000μF						
Leakage Current	I ≤ 0.02CV + 10μA					
	I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Apply rated voltage the rated voltage for 2 minutes.					
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	160~250	400	450	500~550	(at 120Hz)
	Z(-25°C)/Z(+20°C)	3	4	6	8	
	Z(-40°C)/Z(+20°C)	6	6	10	10	
Endurance	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 2,000 hours at 105°C.					
	Capacitance change	≒ ±20% of the initial value				
	Dissipation factor(tan δ)	≒ 200% of the specified value				
	Leakage current	≒ specified value				
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.					
	Capacitance change	≒ ±20% of the initial value				
	Dissipation factor(tan δ)	≒ 200% of the specified value				
	Leakage current	≒ 200% of the specified value				
Others	Conforms to JIS-C-5101-4 (1998) and IEC 60384-4					

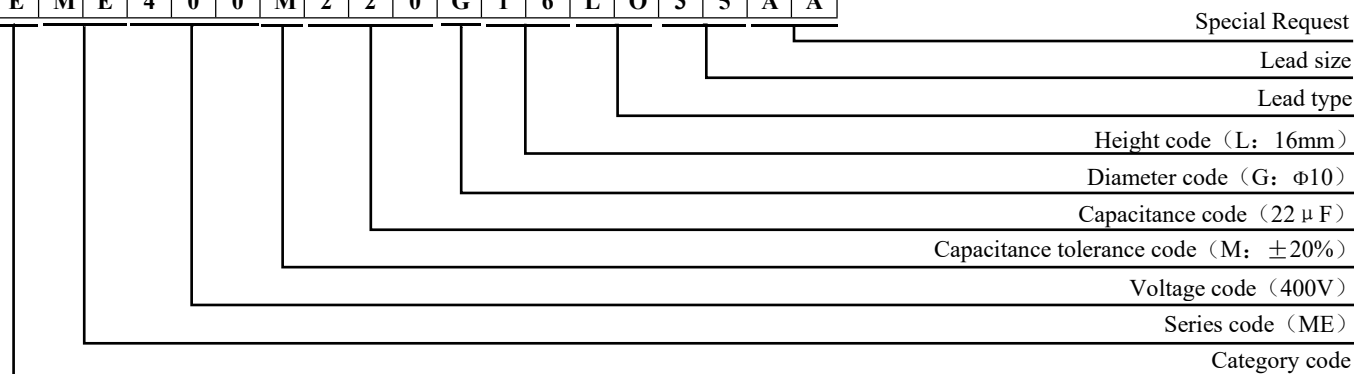
◆ DIMENSIONS(mm)



ΦD	5	6.3	8	10	12.5/13	16	18	20	22
ΦD	ΦD ± 0.5 Max								
Φd	0.5	0.5	0.5/0.6	0.6	0.6	0.8	0.8	1.0	1.0
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	10
a	< 20 L ± 1.5Max ≥ 20 L ± 2.0Max								

◆ PART NUMBER SYSTEM(Example :400V 22μF)

E M E 4 0 0 M 2 2 0 G 1 6 L O 3 5 A A



ME Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz.

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)
160	2.2	6.3×11	27	200	2.2	6.3×11	27
	3.3	6.3×11	32		3.3	6.3×9	33
	4.7	6.3×12	39		4.7	8×12	52
	6.8	6.3×12	42		6.8	8×12	60
	10	6.3×12	48		10	8×12	80
	22	8×14	85		15	10×13	90
	27	8×16	102		22	10×16	128
	33	10×13	120		33	10×16	160
	47	8×16	120		39	8×20	250
	47	10×16	145		47	10×16	180
	68	10×20	216		56	10×20	210
	82	8×30	240		68	13×20	270
	100	13×25	300		82	13×20	290
	100	16×21	320		100	13×25	300
	120	13×25	330		100	16×21	320
	150	16×21	354		120	13×25	330
	180	16×25	550		120	16×25	370
	220	16×32	560		150	16×26	390
	220	18×26	545		180	16×30	550
	270	13×30	537		220	16×35	670
270	16×30	560	270	16×30	560		
330	18×35	700	330	18×35	750		
470	18×35	810	470	18×40	840		
560	18×40	933	560	18×45	950		
820	20×40	1150	680	18×50	1050		
250	1	6.3×11	18	350	2.2	8×12	31
	2.2	6.3×11	23		3.3	8×12	35
	3.3	6.3×11	30		4.7	10×12	52
	4.7	6.3×11	38		6.8	10×13	80
	6.8	8×12	60		10	10×16	90
	10	10×12	80		15	10×20	120
	15	10×13	98		22	13×20	165
	22	10×16	128		33	13×20	185
	33	10×20	175		47	16×25	248
	47	13×20	230		56	16×25	330
	56	13×20	255		68	16×30	370
	68	13×20	268		82	16×35	390
	82	13×20	290		100	18×30	398
	100	13×25	310		120	18×35	420
	120	18×20	310		150	18×40	430
	150	16×26	365		180	18×40	440
	180	18×26	403				
	220	18×30	500				
	330	18×35	650				
	390	18×40	720				
470	18×45	800					

ME Series

Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz.

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)
400	1	6.3×9	25	420	8.2	8×12	72
	2.2	6.3×9	30		10	10×13	135
		8×12	42		12	10×13	140
	3.3	6.3×9	35		15	8×16	138
		8×12	69		18	8×18	155
	4.7	6.3×12	45			8×20	160
		8×12	82		22	8×20	170
	5.6	8×12	90			10×16	185
	6.8	6.3×14	84		27	8×25	200
		8×12	100			10×18	205
	8.2	8×12	109		33	10×18	210
		8×16	114			10×20	230
	10	8×12	120		39	10×20	240
		10×9	135			13×17	260
	12	8×12	130		47	13×20	340
		8×14	150			13×25	363
	15	8×16	155		56	16×18	370
		10×13	170		68	16×25	475
	18	8×17	170		82	18×20	470
		10×14	195		100	16×30	490
	22	8×18	165			18×25	510
		8×20	174		120	16×35	580
		10×15	220			18×30	570
		10×16	220		150	18×35	620
	27	8×20	195		180	18×40	680
		10×15	220				
		10×18	253				
	33	8×26	230				
		10×18	253				
		13×16	250				
	39	10×20	310				
		13×17	285				
47	10×25	302					
	13×20	340					
	16×17	350					
56	10×35	390					
	13×20	350					
68	16×25	403					
	18×20	437					
82	18×25	470					
100	18×26	492					
	18×30	530					
120	18×30	550					
150	18×30	570					
180	18×36	640					
220	18×45	800					

ME Series

◆ **Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz.**

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)	
450	2.2	10×13	35	500	2.2	8×12	49	
	3.3	10×13	46		3.3	8×12	60	
	4.7	8×12	55		4.7	8×12	70	
		10×13	75		6.8	10×13	88	
	6.8	8×14	65		10	10×13	95	
		10×13	84		12	10×16	140	
	10	8×16	94		15	10×17	165	
		10×13	98		22	13×16	230	
		10×16	135		22	13×20	260	
	12	8×16	104		33	16×20	273	
		10×16	140		47	18×20	440	
	15	8×17	145		47	16×30	465	
		10×16	165		68	16×35	495	
		13×15	185			18×26	455	
	18	10×17	170		82	16×32	500	
	22	10×17	190			18×32	553	
		13×17	215		100	18×35	583	
		13×20	280		150	22×35	735	
	27	13×17	228		550	4.7	10×13	54
	33	13×20	300			5.6	10×11	50
		16×20	320			6.8	8×16	75
	39	16×21	350			10	10×16	112
	47	13×25	400				13×14	100
		16×20	437			12	10×16	123
		18×21	450			15	13×16	190
	56	13×30	468			18	13×16	250
		16×21	450			22	13×20	283
	68	16×26	485			27	13×17	290
16×35		560	33	13×30		475		
82	16×30	587	47	18×25		470		
	18×26	565	68	16×35		550		
100	16×35	610		18×30		550		
	18×32	587	82	18×45		635		
120	18×35	650	100	18×50		710		
150	18×35	670						
180	18×40	720						
220	18×45	880						

◆ **RIPPLE CURRENT MULTIPLIERS**
Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)				
		50/60	120	1K	10K	100K
160	0.47 ~ 68	0.75	1.00	1.35	1.57	2.00
	100 ~ 680	0.80	1.00	1.30	1.40	1.50
	1000 ~ 22000	0.85	1.00	1.10	1.13	1.15
200 ~ 550	0.47 ~ 220	0.80	1.00	1.25	1.40	1.40
	330 ~ 560	0.90	1.00	1.10	1.13	1.15