

EM

- Small size, Extra Long Life
- Endurance 1000 hours at 105°C
- Comply with the RoHS

SPECIFICATIONS

Category Temperature	-40+105°C								
Voltage Range	10-100V.DC								
Capacitance Tolerance	±20%(120Hz,20°C)								
Leakage Current	I≤0.01CV(μA) or 3μA, whichever is greater (2 minutes)								
Dissipation Factor (120hz、20°C)	WV	10	16	25	35	50	63	100	
	tgδ	0.45	0.35	0.30	0.22	0.19	0.17	0.15	
When nominal capacitance is over 1000 μF, tanδ shall be added 0.02 to the list value with increase of every 1000 μF.									
Stability at Low Temperature (120Hz)	WV	10	16	25	35	50	63	100	
	Z _{-25°C} /Z _{+20°C}	8	6	4	4	3	3	3	
Endurance	Z _{-40°C} /Z _{+20°C}	13	10	8	8	7	7	7	
	In an environment of +105°C, apply the operating voltage with ripple current for 1000 hours, and after 16 hours of recovery, the product performance meets the following requirements:								
Shelf Life	Capacitance Change	Within ±25%of initial measured value							
	Dissipation Factor	≤200% of initial specified value							
	Leakage Current	≤initial specified value							
Capacitance Change	Within ±25%of initial measured value								
	Dissipation Factor	≤200% of initial specified value							
	Leakage Current	≤200% of initial specified value							

DRAWING & DIMENSIONS (Unit: mm)

ΦD	5	6.3	8	10	13	16	18
F±0.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd±0.05	0.5	0.5	0.5	0.6	0.6	0.8	0.8
L	(L<20)	±1.5		(L≥20)	±2.0		
D	(D<20)	±0.5		(D≥20)	±1.0		

REQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT

Capacitance(μF)	Frequency(Hz)	120	1K	10K	100K
Capacitance<22		0.42	0.60	0.80	1.00
22≤Capacitance<47		0.55	0.75	0.90	1.00
Capacitance>47		0.70	0.85	0.95	1.00

EM

NOMINAL CAPACITANCE, RATED VOLTAGE & DIMENSIONS

	10V (1A)			16V (1C)		
	Dimensions (mm)	Ripple Current (mA)	Part Number	Dimensions (mm)	Ripple Current (mA)	Part Number
47				5X11	130	EM1C470M0511BDH00000
100	5X11	130	EM1A101M0511BDH00000	6.3X12	210	EM1C101M6L12CDH00000
220	6.3X12	210	EM1A221M6L12CDH00000			

	25V (1E)			35V (1V)		
	Dimensions (mm)	Ripple Current (mA)	Part Number	Dimensions (mm)	Ripple Current (mA)	Part Number
33	5X11	130	EM1E330M0511BDH00000	5X11	130	EM1V330M0511BDH00000
47	5X11	130	EM1E470M0511BDH00000	6.3X12	210	EM1V470M6L12CDH00000
100	6.3X12	210	EM1E101M6L12CDH00000			

	50V (1H)			63V (1J)		
	Dimensions (mm)	Ripple Current (mA)	Part Number	Dimensions (mm)	Ripple Current (mA)	Part Number
4.7	5X11	80	EM1H4R7M0511BDH00000			
10	5X11	90	EM1H100M0511BDH00000	5X11	80	EM1J100M0511BDH00000
22	5X11	110	EM1H220M0511BDH00000	6.3X12	170	EM1J220M6L12CDH00000
33	6.3X12	190	EM1H330M6L12CDH00000	6.3X12	170	EM1J330M6L12CDH00000
47	6.3X12	190	EM1H470M6L12CDH00000			

	100V (2A)			Part Number
	Dimensions (mm)	Ripple Current (mA)		
4.7	5X11	70		EM2A4R7M0511BDH00000
10	6.3X12	150		EM2A100M6L12CDH00000

Rated ripple current: (105°C, 100kHz)

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