

MXC SERIES

105°C Standard, Snap-in Terminal Type

◆FEATURES

- Load Life : 105°C 3000 hours.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics																																											
Category Temperature Range	-40~+105℃								-25~+105℃																																			
Rated Voltage Range	10~100V.DC								160~450V.DC																																			
Capacitance Tolerance	±20% (20℃,120Hz)																																											
Leakage Current(MAX)	I=3√CV (After 5 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(V)																																											
(tanδ) Dissipation Factor(MAX)	<table><tr><td>Rated Voltage (V)</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160~400</td><td>420~450</td></tr><tr><td>tanδ</td><td>0.55</td><td>0.50</td><td>0.45</td><td>0.40</td><td>0.35</td><td>0.30</td><td>0.25</td><td>0.20</td><td>0.15</td><td>0.20</td></tr></table> (20℃,120Hz)											Rated Voltage (V)	10	16	25	35	50	63	80	100	160~400	420~450	tanδ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.20											
Rated Voltage (V)	10	16	25	35	50	63	80	100	160~400	420~450																																		
tanδ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.20																																		
Endurance	After applying rated voltage with rated ripple current for 3000 hours at 105℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td colspan="10">Within ±20% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td colspan="10">Not more than 200% of the specified value.</td></tr><tr><td>Leakage Current</td><td colspan="10">Not more than the specified value.</td></tr></table>											Capacitance Change	Within ±20% of the initial value.										Dissipation Factor	Not more than 200% of the specified value.										Leakage Current	Not more than the specified value.									
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Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (V)</td><td>10~100</td><td>160~250</td><td>315~450</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>3</td><td>3</td><td>8</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>12</td><td>—</td><td>—</td></tr></table> (120Hz)											Rated Voltage (V)	10~100	160~250	315~450	Z(-25℃)/Z(20℃)	3	3	8	Z(-40℃)/Z(20℃)	12	—	—																					
Rated Voltage (V)	10~100	160~250	315~450																																									
Z(-25℃)/Z(20℃)	3	3	8																																									
Z(-40℃)/Z(20℃)	12	—	—																																									

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

Frequency (Hz)		60(50)	120	500	1k	10k≤
Coefficient	10~100WV	0.90	1.00	1.05	1.10	1.15
	160~250WV	0.80	1.00	1.20	1.30	1.50
	315~450WV	0.80	1.00	1.20	1.25	1.40

◆PART NUMBER

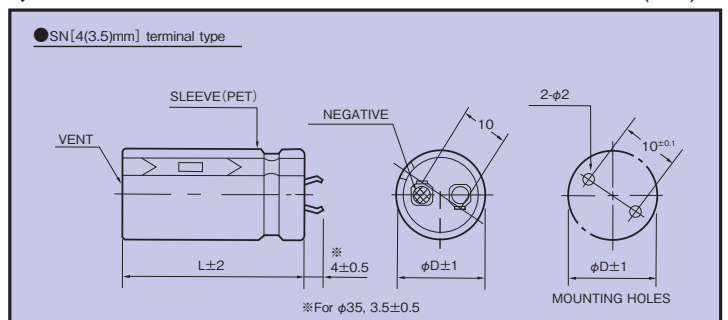
□□□ MXC □□□□□ M □□□ SN D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆OPTION

	Code
PET Sleeve without plate	EFC

◆DIMENSIONS

(mm)



◆STANDARD SIZE

Cap (μF)	WV φD	10					16				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
6800		20×25: 1.31					20×25: 1.80				
8200		20×30: 1.59					20×30: 2.08	22×25: 2.08			
10000		20×30: 1.88	22×25: 1.77				20×35: 2.15	22×30: 2.15			
12000		20×35: 2.18	22×30: 2.10	25×25: 1.94			20×40: 2.31	22×30: 2.31	25×25: 2.31		
15000		20×40: 2.27	22×35: 2.23	25×30: 2.10				22×35: 2.68	25×30: 2.68		
18000			22×40: 2.41	25×30: 2.34	30×25: 2.25			22×40: 3.20	25×30: 3.20	30×25: 3.20	
22000			22×45: 2.58	25×35: 2.54	30×30: 2.50			22×45: 3.36	25×35: 3.36	30×30: 3.36	
27000			22×50: 3.17	25×40: 3.07	30×30: 2.95			22×50: 3.85	25×40: 3.85	30×30: 3.85	
33000				25×45: 3.39	30×35: 3.33	35×30: 3.21			25×45: 4.30	30×35: 4.30	35×30: 4.30
39000					30×40: 3.70	35×35: 3.68			25×50: 4.81	30×40: 4.81	35×35: 4.81
47000					30×45: 4.22	35×40: 4.16				30×45: 5.53	35×40: 5.53
56000						35×45: 5.00				30×50: 6.00	35×45: 6.00
68000											35×50: 6.40

Cap (μF)	WV φD	25					35				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
2700							20×25: 1.29				
3300							20×30: 1.57				
3900							20×30: 1.78	22×25: 1.78			
4700		20×25: 1.65					20×35: 2.02	22×30: 2.02			
5600		20×30: 1.85	22×25: 1.85				20×40: 2.13	22×35: 2.13	25×25: 2.13		
6800		20×35: 2.11	22×30: 2.11					22×40: 2.41	25×30: 2.41		
8200		20×40: 2.34	22×30: 2.34	25×25: 2.34				22×45: 2.85	25×35: 2.85	30×25: 2.85	
10000			22×35: 2.65	25×30: 2.65				22×50: 3.05	25×40: 3.05	30×30: 3.05	
12000			22×40: 2.81	25×30: 2.81	30×25: 2.81				25×45: 3.37	30×35: 3.37	35×30: 3.37
15000			22×45: 3.13	25×35: 3.13	30×30: 3.13				25×50: 3.72	30×40: 3.72	35×35: 3.72
18000				25×40: 3.56	30×30: 3.56					30×45: 4.37	35×35: 4.37
22000				25×50: 4.04	30×35: 4.04	35×30: 4.04				30×50: 4.92	35×40: 4.92
27000					30×40: 4.74	35×35: 4.74					35×50: 5.30
33000					30×50: 5.50	35×40: 5.50					
39000						35×45: 5.80					
47000						35×50: 6.30					

Cap (μF)	WV φD	50					63				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
1200							20×25: 1.20				
1500							20×30: 1.47	22×25: 1.47			
1800		20×25: 1.39					20×35: 1.58	22×30: 1.58			
2200		20×30: 1.60	22×25: 1.60				20×40: 1.82	22×35: 1.82	25×25: 1.82		
2700		20×35: 1.73	22×30: 1.73	25×25: 1.73				22×35: 2.11	25×30: 2.11		
3300		20×40: 1.97	22×35: 1.97	25×30: 1.97				22×45: 2.33	25×35: 2.33	30×25: 2.33	
3900			22×40: 2.22	25×30: 2.22				22×50: 2.55	25×40: 2.55	30×30: 2.55	
4700			22×45: 2.43	25×35: 2.43	30×25: 2.43				25×45: 2.97	30×35: 2.97	
5600			22×50: 2.75	25×40: 2.75	30×30: 2.75				25×50: 3.22	30×35: 3.22	35×30: 3.22
6800				25×45: 3.30	30×35: 3.30					30×40: 3.65	35×35: 3.65
8200				25×50: 3.60	30×40: 3.60	35×30: 3.60				30×50: 4.04	35×40: 4.04
10000					30×45: 4.05	35×35: 4.05					35×45: 4.48
12000					30×50: 4.56	35×40: 4.56					35×50: 4.75
15000						35×50: 4.77					

Cap (μF)	WV φD	80					100				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
560							20×25: 0.95				
680							20×30: 1.15	22×25: 1.15			
820		20×25: 1.04					20×35: 1.32	22×30: 1.32			
1000		20×30: 1.24	22×25: 1.24				20×35: 1.47	22×30: 1.47	25×25: 1.47		
1200		20×35: 1.44	22×30: 1.44				20×40: 1.69	22×35: 1.69	25×30: 1.69		
1500		20×35: 1.59	22×30: 1.59	25×25: 1.59				22×40: 1.98	25×35: 1.98	30×25: 1.98	
1800		20×40: 1.79	22×35: 1.79	25×30: 1.79				22×45: 2.23	25×35: 2.23	30×30: 2.23	
2200			22×40: 2.03	25×30: 2.03	30×25: 2.03				25×45: 2.55	30×35: 2.55	35×30: 2.55
2700			22×45: 2.39	25×35: 2.39	30×30: 2.39				25×50: 2.89	30×40: 2.89	35×30: 2.89
3300				25×40: 2.64	30×35: 2.64					30×45: 3.30	35×35: 3.30
3900				25×50: 2.97	30×35: 2.97	35×30: 2.97				30×50: 3.67	35×40: 3.67
4700					30×40: 3.38	35×35: 3.38					35×45: 3.80
5600					30×45: 3.80	35×40: 3.80					35×50: 4.05
6800						35×45: 4.10					
8200						35×50: 4.30					

↑ Ripple Current (A r.m.s./120Hz, 105°C)
↑ Case Size φD×L(mm)

◆STANDARD SIZE

Cap (μF)	WV φD	160					180				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
270		20×25: 1.10					20×25: 0.93				
330		20×30: 1.20	22×25: 1.21				20×30: 1.20	22×25: 1.20			
390		20×30: 1.24	22×25: 1.30				20×35: 1.30	22×30: 1.35			
470		20×35: 1.42	22×30: 1.41				20×40: 1.40	22×35: 1.42	25×25: 1.38		
560		20×40: 1.57	22×35: 1.54	25×25: 1.51			20×45: 1.55	22×40: 1.60	25×30: 1.55		
680		20×45: 1.70	22×40: 1.74	25×30: 1.74	30×25: 1.74			22×45: 1.78	25×35: 1.78	30×25: 1.55	
820			22×45: 2.00	25×35: 2.00	30×30: 2.00			22×50: 2.00	25×40: 2.00	30×30: 2.00	35×25: 2.00
1000			22×50: 2.25	25×40: 2.25	30×30: 2.25	35×25: 2.25			25×45: 2.25	30×35: 2.25	35×30: 2.26
1200				25×45: 2.49	30×35: 2.49	35×30: 2.45			25×50: 2.54	30×40: 2.52	35×30: 2.60
1500					30×40: 2.84	35×30: 2.68				30×45: 2.90	35×35: 2.95
1800					30×45: 3.32	35×35: 3.00				30×50: 3.00	35×40: 3.30
2200						35×45: 3.50					35×50: 3.65
2700						35×50: 4.00					

Cap (μF)	WV φD	200					220				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
180							20×25: 0.86				
220		20×25: 1.00					20×30: 1.04	22×25: 0.99			
270		20×30: 1.10	22×25: 1.10				20×30: 1.08	22×25: 1.04			
330		20×30: 1.15	22×30: 1.25				20×35: 1.30	22×30: 1.32	25×25: 1.26		
390		20×35: 1.25	22×30: 1.31	25×25: 1.31			20×40: 1.45	22×35: 1.42	25×30: 1.45		
470		20×40: 1.42	22×35: 1.45	25×30: 1.45			20×45: 1.63	22×40: 1.67	25×30: 1.54	30×25: 1.48	
560			22×40: 1.60	25×30: 1.60	30×25: 1.60			22×45: 1.77	25×35: 1.66	30×30: 1.65	
680			22×45: 1.75	25×35: 1.78	30×30: 1.78				25×40: 1.87	30×30: 1.82	35×25: 1.78
820			22×50: 1.95	25×40: 1.95	30×30: 2.00				25×45: 2.04	30×35: 2.00	35×30: 1.93
1000				25×45: 2.10	30×35: 2.30	35×30: 2.30				30×40: 2.48	35×35: 2.33
1200					30×40: 2.64	35×35: 2.65				30×45: 2.88	35×40: 2.65
1500					30×50: 3.08	35×40: 3.08					35×45: 2.96
1800						35×45: 3.48					35×50: 3.39
2200						35×50: 3.55					

Cap (μF)	WV φD	250					315				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
82							20×25: 0.64				
100							20×30: 0.69	22×25: 0.62			
120							20×30: 0.75	22×25: 0.75	25×25: 0.76		
150							20×35: 0.82	22×30: 0.82	25×25: 0.82		
180							20×40: 0.90	22×35: 0.92	25×25: 0.90		
220		20×30: 1.00	22×25: 1.00				20×50: 1.00	22×40: 1.04	25×30: 1.04	30×25: 1.04	
270		20×35: 1.10	22×30: 1.15					22×45: 1.16	25×35: 1.15	30×25: 1.15	35×25: 1.15
330		20×40: 1.20	22×35: 1.28					22×50: 1.22	25×40: 1.23	30×30: 1.33	35×25: 1.32
390		20×45: 1.35	22×40: 1.49	25×30: 1.35	30×25: 1.49				25×45: 1.40	30×35: 1.47	35×30: 1.47
470			22×45: 1.60	25×35: 1.57	30×30: 1.65					30×40: 1.70	35×30: 1.70
560			22×50: 1.72	25×40: 1.80	30×30: 1.80					30×45: 2.05	35×35: 1.90
680				25×45: 1.85	30×35: 2.00	35×30: 2.00				30×50: 2.14	35×40: 2.17
820				25×50: 2.10	30×40: 2.18	35×35: 2.30					35×45: 2.20
1000					30×45: 2.40	35×35: 2.35					
1200						35×40: 2.50					
1500						35×50: 3.00					

Cap (μF)	WV φD	350					385				
		φ20	φ22	φ25	φ30	φ35	φ20	φ22	φ25	φ30	φ35
56							20×25: 0.42				
68		20×25: 0.47					20×30: 0.47	22×25: 0.49			
82		20×30: 0.55					20×30: 0.52	22×25: 0.55			
100		20×30: 0.60	22×25: 0.69				20×35: 0.60	22×30: 0.66	25×25: 0.66		
120		20×35: 0.70	22×30: 0.75	25×25: 0.75			20×40: 0.68	22×35: 0.71	25×25: 0.71		
150		20×40: 0.78	22×35: 0.82	25×30: 0.83				22×40: 0.83	25×30: 0.83	30×25: 0.77	
180		20×45: 0.88	22×40: 0.92	25×30: 0.92	30×25: 0.92			22×45: 0.92	25×35: 0.92	30×30: 0.89	
220			22×45: 1.05	25×35: 1.05	30×30: 1.02			22×50: 1.03	25×40: 1.03	30×30: 1.01	35×25: 1.03
270			22×50: 1.18	25×40: 1.18	30×30: 1.18	35×25: 1.20			25×45: 1.14	30×35: 1.15	35×30: 1.13
330				25×45: 1.30	30×35: 1.35	35×30: 1.22				30×40: 1.32	35×30: 1.35
390				25×50: 1.45	30×40: 1.52	35×35: 1.48				30×45: 1.46	35×35: 1.50
470					30×45: 1.65	35×35: 1.70				30×50: 1.72	35×40: 1.79
560					30×50: 1.85	35×40: 1.90					35×45: 1.99
680						35×45: 2.00					

↑ Ripple Current (A r.m.s./120Hz, 105°C)
↑ Case Size φD×L(mm)

◆STANDARD SIZE

Cap (μ F)	WV ϕ D	400					420				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
56	20×25	0.51					20×25	0.44			
68	20×30	0.56	22×25	0.52			20×30	0.49	22×25	0.51	
82	20×30	0.64	22×25	0.64			20×35	0.54	22×30	0.65	25×25
100	20×35	0.70	22×30	0.70	25×25	0.70	20×35	0.61	22×30	0.68	25×25
120	20×40	0.75	22×35	0.75	25×25	0.75	20×40	0.70	22×35	0.73	25×30
150	20×45	0.83	22×40	0.88	25×30	0.88	30×25	0.82			
180			22×45	0.98	25×35	0.98	30×30	0.95			
220			22×50	1.10	25×40	1.10	30×30	1.10	35×25	1.10	
270				25×45	1.21	30×35	1.22	35×30	1.22		
330					30×40	1.44	35×30	1.44			
390					30×45	1.55	35×35	1.60			
470						35×40	1.90				
560						35×45	2.12				

Cap (μ F)	WV ϕ D	450				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
47	20×25	0.39				
56	20×30	0.51	22×25	0.44		
68	20×35	0.56	22×30	0.53		
82	20×35	0.64	22×30	0.64	25×25	0.64
100	20×45	0.69	22×35	0.69	25×30	0.69
120	20×50	0.75	22×40	0.75	25×30	0.75
150			22×45	0.88	25×35	0.88
180				25×40	0.95	30×30
220				25×45	1.10	30×35
270					30×40	1.28
330					30×50	1.45
390						35×40
470						35×50

↑ Ripple Current (A r.m.s./120Hz, 105°C)
↑ Case Size ϕ D×L(mm)