

MXG SERIES

105°C Miniaturized, Snap-in Terminal Type

◆FEATURES

- Load Life : 105°C 3000 hours.(50~100WV:2000hours)
- Smaller size than MXC series.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics													
Category Temperature Range	-40~+105°C	-25~+105°C												
Rated Voltage Range	500~100V.DC	1600~450V.DC												
Capacitance Tolerance	±20% (20°C, 120Hz)													
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I=Leakage Current(µA) C=Rated Capacitance(µF) V=Rated Voltage(V)													
(tanδ) Dissipation Factor(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>50</td> <td>63</td> <td>80~100</td> <td>160~450</td> </tr> <tr> <td>tan δ</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> </tr> </table> (20°C, 120Hz)		Rated Voltage (V)	50	63	80~100	160~450	tan δ	0.35	0.30	0.25	0.20		
Rated Voltage (V)	50	63	80~100	160~450										
tan δ	0.35	0.30	0.25	0.20										
Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>50~100</td> <td>160~250</td> <td>400~450</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>-</td> <td>-</td> </tr> </table> (120Hz)		Rated Voltage (V)	50~100	160~250	400~450	Z(-25°C)/Z(20°C)	3	4	8	Z(-40°C)/Z(20°C)	12	-	-
Rated Voltage (V)	50~100	160~250	400~450											
Z(-25°C)/Z(20°C)	3	4	8											
Z(-40°C)/Z(20°C)	12	-	-											
Endurance	After applying rated voltage with rated ripple current for 3000hrs(50~100W:2000hrs) at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>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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◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency (Hz)		60(50)	120	500	1k	10k ≤
Coefficient	50~100WV	0.90	1.00	1.05	1.10	1.15
	160~250WV	0.80	1.00	1.20	1.30	1.50
	400~450WV	0.80	1.00	1.20	1.25	1.40

◆PART NUMBER

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MXG
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□
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SN
DXL

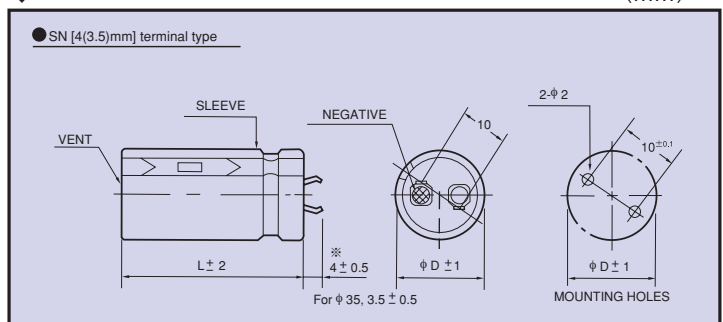
Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆Option

	Code
PET Sleeve without plate	EFC
PVC Sleeve without plate	OOE
PVC Sleeve with plate	Blank

◆DIMENSIONS

(mm)



◆ **STANDARD SIZE**

Cap (μ F)	WV ϕ D	250					400				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
68							20 x 25; 0.49				
82							20 x 25; 0.57	22 x 25; 0.57			
100							20 x 30; 0.70	22 x 25; 0.70			
120							20 x 35; 0.75	22 x 30; 0.75	25 x 25; 0.75		
150							20 x 40; 0.88	22 x 35; 0.88	25 x 25; 0.88		
180								22 x 35; 0.95	25 x 30; 0.95	30 x 25; 0.95	
220		20 x 25; 1.00						22 x 45; 1.10	25 x 35; 1.10	30 x 25; 1.10	
270		20 x 30; 1.10	22 x 25; 1.10					22 x 50; 1.22	25 x 40; 1.22	30 x 30; 1.22	35 x 25; 1.22
330		20 x 35; 1.20	22 x 30; 1.20	25 x 25; 1.20					25 x 45; 1.44	30 x 35; 1.44	35 x 30; 1.44
390		20 x 40; 1.30	22 x 35; 1.30	25 x 25; 1.30					25 x 50; 1.55	30 x 40; 1.55	35 x 30; 1.55
470		20 x 45; 1.40	22 x 40; 1.40	25 x 30; 1.40	30 x 25; 1.40					30 x 45; 1.68	35 x 35; 1.66
560			22 x 45; 1.50	25 x 35; 1.50	30 x 25; 1.50					30 x 50; 1.90	35 x 40; 1.90
680			22 x 50; 1.70	25 x 40; 1.70	30 x 30; 1.70	35 x 25; 1.70					35 x 45; 2.12
820				25 x 45; 2.00	30 x 35; 2.00	35 x 30; 2.00					
1000					30 x 40; 2.20	35 x 35; 2.20					
1200					30 x 45; 2.30	35 x 35; 2.30					
1500						35 x 45; 2.50					
1800						35 x 50; 2.70					

Cap (μ F)	WV ϕ D	420					450				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
56							20 x 25; 0.44				
68		20 x 25; 0.50					20 x 25; 0.50	22 x 25; 0.50			
82		20 x 25; 0.64	22 x 25; 0.64				20 x 30; 0.64	22 x 25; 0.64			
100		20 x 30; 0.66	22 x 25; 0.66	25 x 25; 0.66			20 x 35; 0.69	22 x 30; 0.69	25 x 25; 0.69		
120		20 x 35; 0.81	22 x 30; 0.81	25 x 25; 0.81			20 x 35; 0.72	22 x 30; 0.72	25 x 25; 0.72		
150		20 x 40; 0.84	22 x 35; 0.84	25 x 30; 0.84	30 x 25; 0.84		20 x 45; 0.79	22 x 35; 0.79	25 x 30; 0.79	30 x 25; 0.79	
180		20 x 45; 0.91	22 x 40; 0.91	25 x 30; 0.91	30 x 25; 0.91			22 x 40; 0.87	25 x 35; 0.87	30 x 25; 0.87	
220			22 x 45; 1.05	25 x 35; 1.05	30 x 30; 1.05	35 x 25; 1.05		22 x 50; 1.05	25 x 40; 1.05	30 x 30; 1.05	35 x 25; 1.05
270				25 x 40; 1.25	30 x 30; 1.25	35 x 25; 1.25			25 x 45; 1.23	30 x 35; 1.23	35 x 30; 1.23
330				25 x 50; 1.42	30 x 35; 1.42	35 x 30; 1.42			25 x 50; 1.38	30 x 40; 1.38	35 x 30; 1.38
390					30 x 40; 1.61	35 x 35; 1.61				30 x 45; 1.61	35 x 35; 1.61
470					30 x 45; 1.86	35 x 40; 1.86				30 x 50; 1.78	35 x 40; 1.78
560						35 x 45; 2.10					35 x 45; 1.99
680						35 x 50; 2.20					

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

◆ STANDARD SIZE

Cap (μ F)	wV ϕ D	50					63				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
1500							20 × 25; 1.47				
1800							20 × 30; 1.58				
2200		20 × 25; 1.60					20 × 35; 1.82				
2700		20 × 30; 1.73	22 × 25; 1.73					22 × 30; 2.11	25 × 25; 2.11		
3300		20 × 35; 1.97	22 × 30; 1.97					22 × 35; 2.33			
3900		20 × 40; 2.22	22 × 35; 2.22	25 × 25; 2.22				22 × 40; 2.55	25 × 30; 2.55	30 × 25; 2.55	
4700		20 × 45; 2.43	22 × 40; 2.43	25 × 30; 2.43				22 × 45; 2.97	25 × 35; 2.97		
5600			22 × 45; 2.75	25 × 35; 2.75	30 × 25; 2.75				25 × 40; 3.22	30 × 30; 3.22	35 × 25; 3.22
6800			22 × 50; 3.30	25 × 40; 3.30	30 × 30; 3.30	35 × 25; 3.30			25 × 45; 3.65	30 × 35; 3.65	35 × 30; 3.65
8200				25 × 45; 3.60	30 × 35; 3.60					30 × 40; 4.04	35 × 35; 4.04
10000				25 × 50; 4.05	30 × 40; 4.05	35 × 30; 4.05				30 × 45; 4.48	35 × 40; 4.48
12000					30 × 45; 4.56	35 × 35; 4.56					35 × 45; 4.75
15000					30 × 50; 4.77	35 × 40; 4.77					35 × 50; 5.25

Cap (μ F)	wV ϕ D	80					100				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
680							20 × 25; 1.15				
820							20 × 30; 1.32	22 × 25; 1.32			
1000		20 × 25; 1.24					20 × 30; 1.47				
1200		20 × 30; 1.44	22 × 25; 1.44				20 × 35; 1.69	22 × 30; 1.69	25 × 25; 1.69		
1500		20 × 30; 1.59						22 × 35; 1.98	25 × 30; 1.98		
1800		20 × 35; 1.79	22 × 30; 1.79	25 × 25; 1.79				22 × 40; 2.23		30 × 25; 2.23	
2200		20 × 40; 2.03	22 × 35; 2.03						25 × 40; 2.55	30 × 30; 2.55	35 × 25; 2.55
2700			22 × 40; 2.39		30 × 25; 2.39				25 × 45; 2.89	30 × 35; 2.89	
3300			22 × 50; 2.64		30 × 30; 2.64	35 × 25; 2.64			25 × 50; 3.30	30 × 40; 3.30	
3900				25 × 45; 2.97	30 × 30; 2.97					30 × 45; 3.67	35 × 35; 3.67
4700				25 × 50; 3.38	30 × 35; 3.38	35 × 30; 3.38				30 × 50; 3.80	35 × 40; 3.80
5600					30 × 40; 3.80	35 × 35; 3.80					35 × 45; 4.05
6800					30 × 50; 4.10	35 × 40; 4.10					
8200						35 × 45; 4.30					

Cap (μ F)	wV ϕ D	160					180				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
330		20 × 25; 1.17					20 × 25; 1.20				
390		20 × 25; 1.28					20 × 30; 1.28	22 × 25; 1.28			
470		20 × 30; 1.40	22 × 25; 1.40				20 × 35; 1.38	22 × 30; 1.38			
560		20 × 35; 1.50	22 × 30; 1.50				20 × 40; 1.50	22 × 30; 1.50	25 × 25; 1.50		
680		20 × 40; 1.70	22 × 30; 1.70	25 × 25; 1.70			20 × 45; 1.70	22 × 35; 1.70	25 × 30; 1.70		
820			22 × 35; 2.00	25 × 30; 2.00				22 × 40; 2.00	25 × 35; 2.00	30 × 25; 2.00	
1000			22 × 40; 2.20	25 × 35; 2.20	30 × 25; 2.20				25 × 40; 2.20	30 × 30; 2.20	35 × 25; 2.20
1200				25 × 40; 2.30	30 × 30; 2.30	35 × 25; 2.30			25 × 45; 2.30	30 × 35; 2.30	35 × 30; 2.30
1500				25 × 45; 2.50	30 × 35; 2.50	35 × 30; 2.50			25 × 50; 2.50	30 × 40; 2.50	35 × 30; 2.50
1800					30 × 40; 2.70	35 × 35; 2.70				30 × 45; 2.70	35 × 35; 2.70
2200					30 × 45; 2.90	35 × 40; 2.90				30 × 50; 2.90	35 × 40; 2.90
2700						35 × 45; 3.10					35 × 50; 3.10

Cap (μ F)	wV ϕ D	200					220				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
220							20 × 25; 0.98				
270		20 × 25; 0.99					20 × 30; 1.08	22 × 25; 1.08			
330		20 × 30; 1.20	22 × 25; 1.20				20 × 30; 1.26	22 × 25; 1.26			
390		20 × 30; 1.34	22 × 25; 1.34				20 × 35; 1.34	22 × 30; 1.34	25 × 25; 1.34		
470		20 × 35; 1.48	22 × 30; 1.48	25 × 25; 1.48			20 × 40; 1.48	22 × 35; 1.48	25 × 25; 1.48		
560		20 × 40; 1.60	22 × 35; 1.60	25 × 25; 1.60			20 × 45; 1.61	22 × 40; 1.61	25 × 30; 1.61	30 × 25; 1.61	
680			22 × 40; 1.75	25 × 30; 1.75	30 × 25; 1.75			22 × 45; 1.78	25 × 35; 1.78	30 × 25; 1.78	
820			22 × 45; 2.04	25 × 35; 2.04	30 × 25; 2.04			22 × 50; 1.93	25 × 40; 1.93	30 × 30; 1.93	35 × 25; 1.93
1000				25 × 45; 2.30	30 × 30; 2.30				25 × 50; 2.33	30 × 35; 2.33	35 × 30; 2.33
1200				25 × 50; 2.65	30 × 35; 2.65	35 × 30; 2.65				30 × 40; 2.50	35 × 35; 2.50
1500					30 × 45; 2.80	35 × 35; 2.80				30 × 50; 2.76	35 × 40; 2.76
1800					30 × 50; 3.08	35 × 40; 3.08					35 × 45; 3.11
2200						35 × 45; 3.48					

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