

MXG SERIES

105°C Standard, Snap-in Terminal Type

◆FEATURES

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



◆SPECIFICATIONS

Items	Characteristics																							
Category Temperature Range	-40~+105℃			-25~+105℃																				
Rated Voltage Range	50~250V.DC			400~500V.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)																							
Dissipation Factor(MAX) (tanδ)	<table><tr><td>Rated Voltage (V)</td><td>50</td><td>63</td><td>80~ 100</td><td>160~ 450</td><td>500</td></tr><tr><td>tanδ</td><td>0.35</td><td>0.30</td><td>0.25</td><td>0.20</td><td>0.25</td></tr></table> (20℃, 120Hz)						Rated Voltage (V)	50	63	80~ 100	160~ 450	500	tanδ	0.35	0.30	0.25	0.20	0.25						
Rated Voltage (V)	50	63	80~ 100	160~ 450	500																			
tanδ	0.35	0.30	0.25	0.20	0.25																			
Endurance	After applying rated voltage with rated ripple current for 3000 hours (50~100W:2000 hours) at 105℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td colspan="5">Within ±20% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td colspan="5">Not more than 200% of the specified value.</td></tr><tr><td>Leakage Current</td><td colspan="5">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>50~ 100</td><td>160~ 250</td><td>400~ 450</td><td>500</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>3</td><td>4</td><td>8</td><td>12</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>12</td><td>15</td><td>—</td><td>—</td></tr></table> (120Hz)						Rated Voltage (V)	50~ 100	160~ 250	400~ 450	500	Z(-25℃)/Z(20℃)	3	4	8	12	Z(-40℃)/Z(20℃)	12	15	—	—			
Rated Voltage (V)	50~ 100	160~ 250	400~ 450	500																				
Z(-25℃)/Z(20℃)	3	4	8	12																				
Z(-40℃)/Z(20℃)	12	15	—	—																				

◆MULTIPLIER FOR RIPPLE CURRENT

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
	400~500WV	0.80	1.00	1.20	1.25	1.40

◆PART NUMBER

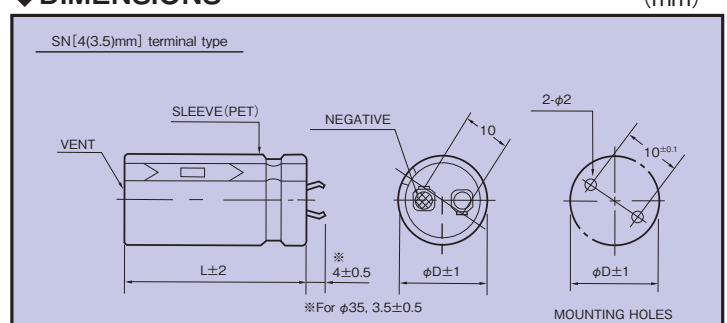
□□□ Rated Voltage MXG Series □□□□□ Capacitance M Capacitance Tolerance □□□ Option SN Terminal Code D×L Case Size

◆OPTION

	Code
PET Sleeve without plate	EFC

◆DIMENSIONS

(mm)



◆STANDARD SIZE

Cap (μ F)	V.DC 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	25×30: 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	30×30: 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	35×30: 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)	V.DC 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	22×30: 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	22×30: 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	25×35: 2.23	30×25: 2.23	
2200	20×40: 2.03	22×35: 2.03	25×30: 2.03						25×40: 2.55	30×30: 2.55	35×25: 2.55
2700		22×40: 2.39	25×35: 2.39	30×25: 2.39					25×45: 2.89	30×35: 2.89	35×30: 2.89
3300		22×50: 2.64	25×40: 2.64	30×30: 2.64	35×25: 2.64				25×50: 3.30	30×40: 3.30	35×35: 3.30
3900			25×45: 2.97	30×30: 2.97	35×30: 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)	V.DC 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

Ripple Current (A r.m.s./120Hz, 105°C)

 Case Size ϕ D×L(mm)

◆STANDARD SIZE

Cap (μ F)	V.DC 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							20x25: 0.98				
270		20x25: 0.99					20x30: 1.08	22x25: 1.08			
330		20x30: 1.20	22x25: 1.20				20x30: 1.26	22x25: 1.26			
390		20x30: 1.34	22x25: 1.34				20x35: 1.34	22x30: 1.34	25x25: 1.34		
470		20x35: 1.48	22x30: 1.48	25x25: 1.48			20x40: 1.48	22x35: 1.48	25x25: 1.48		
560		20x40: 1.60	22x35: 1.60	25x25: 1.60			20x45: 1.61	22x40: 1.61	25x30: 1.61	30x25: 1.61	
680			22x40: 1.75	25x30: 1.75	30x25: 1.75			22x45: 1.78	25x35: 1.78	30x25: 1.78	
820			22x45: 2.04	25x35: 2.04	30x25: 2.04			22x50: 1.93	25x40: 1.93	30x30: 1.93	35x25: 1.93
1000				25x45: 2.30	30x30: 2.30				25x50: 2.33	30x35: 2.33	35x30: 2.33
1200				25x50: 2.65	30x35: 2.65	35x30: 2.65				30x40: 2.50	35x35: 2.50
1500					30x45: 2.80	35x35: 2.80				30x50: 2.76	35x40: 2.76
1800					30x50: 3.08	35x40: 3.08					35x45: 3.11
2200						35x45: 3.48					

Cap (μ F)	V.DC 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							20x25: 0.49				
82							20x25: 0.57	22x25: 0.57			
100							20x30: 0.70	22x25: 0.70			
120							20x35: 0.75	22x30: 0.75	25x25: 0.75		
150							20x40: 0.88	22x35: 0.88	25x25: 0.88		
180								22x35: 0.95	25x30: 0.95	30x25: 0.95	
220		20x25: 1.00						22x45: 1.10	25x35: 1.10	30x25: 1.10	
270		20x30: 1.10	22x25: 1.10					22x50: 1.22	25x40: 1.22	30x30: 1.22	35x25: 1.22
330		20x35: 1.20	22x30: 1.20	25x25: 1.20					25x45: 1.44	30x35: 1.44	35x30: 1.44
390		20x40: 1.30	22x35: 1.30	25x25: 1.30					25x50: 1.55	30x40: 1.55	35x30: 1.55
470		20x45: 1.40	22x40: 1.40	25x30: 1.40	30x25: 1.40					30x45: 1.68	35x35: 1.66
560			22x45: 1.50	25x35: 1.50	30x25: 1.50					30x50: 1.90	35x40: 1.90
680			22x50: 1.70	25x40: 1.70	30x30: 1.70	35x25: 1.70					35x45: 2.12
820				25x45: 2.00	30x35: 2.00	35x30: 2.00					
1000					30x40: 2.20	35x35: 2.20					
1200					30x45: 2.30	35x35: 2.30					
1500						35x45: 2.50					
1800						35x50: 2.70					

Ripple Current (A r.m.s./120Hz, 105°C)

Case Size ϕ D×L(mm)

◆STANDARD SIZE

Cap (μ F)	V.DC 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							20x25: 0.44				
68		20x25: 0.50					20x25: 0.50	22x25: 0.50			
82		20x25: 0.64	22x25: 0.64				20x30: 0.64	22x25: 0.64			
100		20x30: 0.66	22x25: 0.66	25x25: 0.66			20x35: 0.69	22x30: 0.69	25x25: 0.69		
120		20x35: 0.81	22x30: 0.81	25x25: 0.81			20x35: 0.72	22x30: 0.72	25x25: 0.72		
150		20x40: 0.84	22x35: 0.84	25x30: 0.84	30x25: 0.84		20x45: 0.79	22x35: 0.79	25x30: 0.79	30x25: 0.79	
180		20x45: 0.91	22x40: 0.91	25x30: 0.91	30x25: 0.91			22x40: 0.87	25x35: 0.87	30x25: 0.87	
220			22x45: 1.05	25x35: 1.05	30x30: 1.05	35x25: 1.05		22x50: 1.05	25x40: 1.05	30x30: 1.05	35x25: 1.05
270				25x40: 1.25	30x30: 1.25	35x25: 1.25			25x45: 1.23	30x35: 1.23	35x30: 1.23
330				25x50: 1.42	30x35: 1.42	35x30: 1.42			25x50: 1.38	30x40: 1.38	35x30: 1.38
390					30x40: 1.61	35x35: 1.61				30x45: 1.61	35x35: 1.61
470					30x45: 1.86	35x40: 1.86				30x50: 1.78	35x40: 1.78
560						35x45: 2.10					35x45: 1.99
680						35x50: 2.20					

Cap (μ F)	V.DC ϕ D	500				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
39		20x25: 0.39				
47		20x30: 0.46	22x25: 0.44			
56		20x35: 0.52	22x30: 0.51			
68		20x40: 0.60	22x30: 0.56	25x25: 0.55		
82		20x45: 0.68	22x35: 0.68	25x30: 0.64	30x25: 0.63	
100			22x40: 0.77	25x35: 0.74	30x25: 0.69	
120			22x50: 0.87	25x35: 0.81	30x30: 0.81	35x25: 0.83
150				25x45: 0.97	30x35: 0.96	35x30: 0.98
180				25x50: 1.10	30x40: 1.07	35x30: 1.06
220					30x45: 1.22	35x40: 1.31
270						35x40: 1.43
330						35x45: 1.63
390						35x55: 1.89
470						35x60: 2.11

Ripple Current (A r.m.s./120Hz, 105°C)

Case Size ϕ D×L(mm)