



**MXG SERIES**

**105°C Miniaturized, Snap-in Terminal Type**

**◆ FEATURES**

- Load Life : 105°C 3,000 hours.(50~100WV:2,000hours)
- Smaller size than MXC series.

• RoHS compliance.



**◆ SPECIFICATIONS**

Items	Characteristics													
Category Temperature Range	-40~+105°C	-25~+105°C												
Rated Voltage Range	50~100V.DC	160~450V.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)      V=Rated Voltage(V)      C=Rated Capacitance(µF)													
Dissipation Factor(MAX) (tanδ)	<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>tanδ</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	tanδ	0.35	0.30	0.25	0.20		
Rated Voltage(V)	50	63	80~100	160~450										
tanδ	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.						
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.													

**◆ 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**

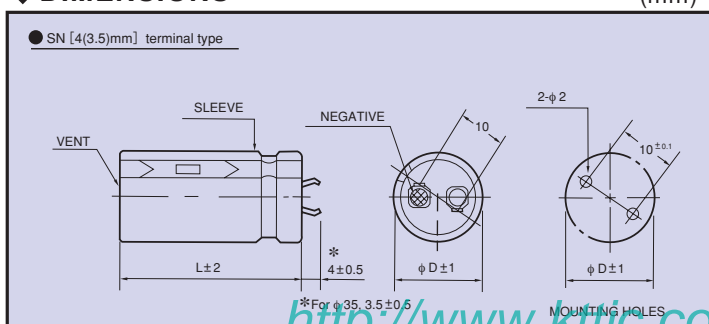
   MXG                      SN    D×L  
 Rated Voltage    Series    Rated Capacitance    Capacitance Tolerance    Option    Terminal Code    Case Size

**◆ Option**

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

**◆ DIMENSIONS**

(mm)





◆ STANDARD SIZE

Cap (μF) \ 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						20x25   1.47				
1800						20x30   1.58				
2200	20x25   1.60					20x35   1.82				
2700	20x30   1.73	22x25   1.73					22x30   2.11	25x25   2.11		
3300	20x35   1.97	22x30   1.97					22x35   2.33			
3900	20x40   2.22	22x35   2.22	25x25   2.22				22x40   2.55	25x30   2.55	30x25   2.55	
4700	20x45   2.43	22x40   2.43	25x30   2.43				22x45   2.97	25x35   2.97		
5600		22x45   2.75	25x35   2.75	30x25   2.75				25x40   3.22	30x30   3.22	35x25   3.22
6800		22x50   3.30	25x40   3.30	30x30   3.30	35x25   3.30			25x45   3.65	30x35   3.65	35x30   3.65
8200			25x45   3.60	30x35   3.60					30x40   4.04	35x35   4.04
10000			25x50   4.05	30x40   4.05	35x30   4.05				30x45   4.48	35x40   4.48
12000				30x45   4.56	35x35   4.56					35x45   4.75
15000				30x50   4.77	35x40   4.77					35x50   5.25

Cap (μF) \ 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						20x25   1.15				
820						20x30   1.32	22x25   1.32			
1000	20x25   1.24					20x30   1.47				
1200	20x30   1.44	22x25   1.44				20x35   1.69	22x30   1.69	25x25   1.69		
1500	20x30   1.59						22x35   1.98	25x30   1.98		
1800	20x35   1.79	22x30   1.79	25x25   1.79				22x40   2.23		30x25   2.23	
2200	20x40   2.03	22x35   2.03						25x40   2.55	30x30   2.55	35x25   2.55
2700		22x40   2.39		30x25   2.39				25x45   2.89	30x35   2.89	
3300		22x50   2.64		30x30   2.64	35x25   2.64			25x50   3.30	30x40   3.30	
3900			25x45   2.97	30x30   2.97					30x45   3.67	35x35   3.67
4700			25x50   3.38	30x35   3.38	35x30   3.38				30x50   3.80	35x40   3.80
5600				30x40   3.80	35x35   3.80					35x45   4.05
6800				30x50   4.10	35x40   4.10					
8200					35x45   4.30					

Cap (μF) \ 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	20x25   1.17					20x25   1.20				
390	20x25   1.28					20x30   1.28	22x25   1.28			
470	20x30   1.40	22x25   1.40				20x35   1.38	22x30   1.38			
560	20x35   1.50	22x30   1.50				20x40   1.50	22x30   1.50	25x25   1.50		
680	20x40   1.70	22x30   1.70	25x25   1.70			20x45   1.70	22x35   1.70	25x30   1.70		
820		22x35   2.00	25x30   2.00				22x40   2.00	25x35   2.00	30x25   2.00	
1000		22x40   2.20	25x35   2.20	30x25   2.20				25x40   2.20	30x30   2.20	35x25   2.20
1200			25x40   2.30	30x30   2.30	35x25   2.30			25x45   2.30	30x35   2.30	35x30   2.30
1500			25x45   2.50	30x35   2.50	35x30   2.50			25x50   2.50	30x40   2.50	35x30   2.50
1800				30x40   2.70	35x35   2.70				30x45   2.70	35x35   2.70
2200				30x45   2.90	35x40   2.90				30x50   2.90	35x40   2.90
2700					35x45   3.10					35x50   3.10

Cap (μF) \ 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						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					

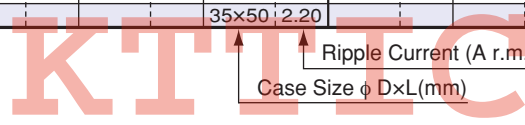
↑ Ripple Current (A r.m.s./120Hz, 105°C)  
 ↑ Case Size φ D x L (mm)



◆ STANDARD SIZE

Cap ( $\mu$ F)	WV $\phi$ D	250					400									
		$\phi$ 20	$\phi$ 22	$\phi$ 25	$\phi$ 30	$\phi$ 35	$\phi$ 20	$\phi$ 22	$\phi$ 25	$\phi$ 30	$\phi$ 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						

Cap ( $\mu$ F)	WV $\phi$ D	420					450												
		$\phi$ 20	$\phi$ 22	$\phi$ 25	$\phi$ 30	$\phi$ 35	$\phi$ 20	$\phi$ 22	$\phi$ 25	$\phi$ 30	$\phi$ 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									



↑ Ripple Current (A r.m.s./120Hz, 105°C)  
 ↑ Case Size  $\phi$  D x L (mm)