

MXR シリーズ  
SERIES

基板自立形105 標準品  
105 Standard, Snap-in Terminal Type

特長 FEATURES

- 105 3000時間品。  
Load Life : 105 3000 hours.
- 従来のMXPシリーズを小形・高リップル化。  
Smaller size with higher ripple current endurance than MXP series.



規格表 SPECIFICATIONS

項目 Items	特性 Characteristics																									
カテゴリ温度範囲 Category Temperature Range	- 40 ~ + 105	- 25 ~ + 105																								
定格電圧範囲 Rated Voltage Range	10 ~ 100V.DC	160 ~ 450V.DC																								
静電容量許容差 Capacitance Tolerance	± 20% ( 20 , 120Hz )																									
漏れ電流 Leakage Current(MAX)	$I = 3\sqrt{CV}$ ( 定格電圧印加5分後 ) $I = 3\sqrt{CV}$ ( After 5 minutes application of rated voltage ) I = 漏れ電流 ( $\mu$ A )      V = 定格電圧 ( V )      C = 定格静電容量 ( $\mu$ F ) Leakage Current      Rated Voltage      Rated Capacitance																									
損失角の正接 ( tan ) Dissipation Factor(MAX)	<table border="1"> <tr> <td>定格電圧 ( V ) Rated Voltage</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 ~ 250</td> <td>315 ~ 450</td> <td>( 20 , 120Hz )</td> </tr> <tr> <td>tan</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>0.15</td> <td></td> </tr> </table>		定格電圧 ( V ) Rated Voltage	10	16	25	35	50	63	80	100	160 ~ 250	315 ~ 450	( 20 , 120Hz )	tan	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.15	
定格電圧 ( V ) Rated Voltage	10	16	25	35	50	63	80	100	160 ~ 250	315 ~ 450	( 20 , 120Hz )															
tan	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.15																
インピーダンス比 Impedance Ratio(MAX)	<table border="1"> <tr> <td>定格電圧 ( V ) Rated Voltage</td> <td>10 ~ 100</td> <td>160 ~ 250</td> <td>315 ~ 450</td> <td>( 120Hz )</td> </tr> <tr> <td>Z ( - 25 ) / Z ( 20 )</td> <td>3</td> <td>3</td> <td>8</td> <td></td> </tr> <tr> <td>Z ( - 40 ) / Z ( 20 )</td> <td>12</td> <td></td> <td></td> <td></td> </tr> </table>		定格電圧 ( V ) Rated Voltage	10 ~ 100	160 ~ 250	315 ~ 450	( 120Hz )	Z ( - 25 ) / Z ( 20 )	3	3	8		Z ( - 40 ) / Z ( 20 )	12												
定格電圧 ( V ) Rated Voltage	10 ~ 100	160 ~ 250	315 ~ 450	( 120Hz )																						
Z ( - 25 ) / Z ( 20 )	3	3	8																							
Z ( - 40 ) / Z ( 20 )	12																									
耐久 Endurance	105 中で3000時間定格電圧 ( リプル重畳 ) 印加後、下記項目を満足すること After applying rated voltage with rated ripple current for 3000hrs at 105 , the capacitors shall meet the following requirements. <table border="1"> <tr> <td>静電容量変化率 Capacitance Change</td> <td>初期値の ± 20% 以内 Within ± 20% of the initial value.</td> </tr> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の200%以下 Not more than 200% of the specified value.</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> </tr> </table>		静電容量変化率 Capacitance Change	初期値の ± 20% 以内 Within ± 20% of the initial value.	損失角の正接 Dissipation Factor	規格値の200%以下 Not more than 200% of the specified value.	漏れ電流 Leakage Current	規格値以下 Not more than the specified value.																		
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漏れ電流 Leakage Current	規格値以下 Not more than the specified value.																									

品番呼称方法 EXPLANATION OF PART NUMBER

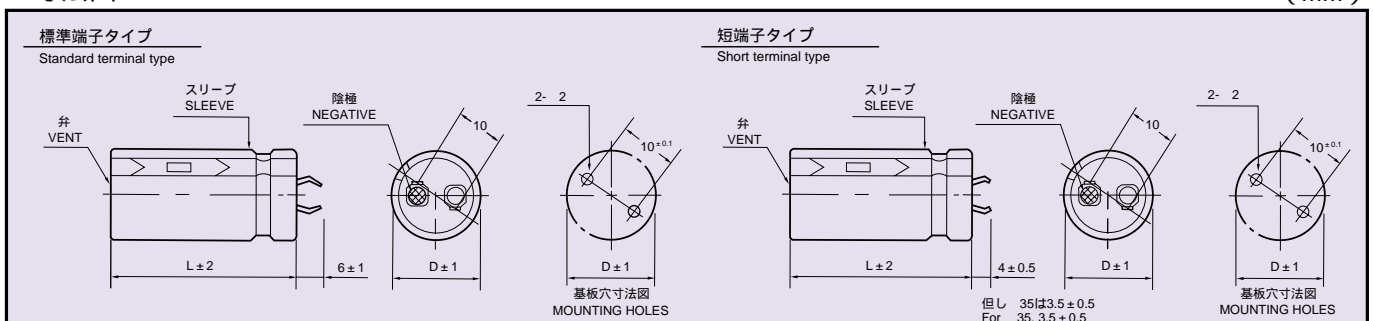
MXR						D x L
定格電圧 Rated Voltage	シリーズ名 Series	定格静電容量 Rated Capacitance	静電容量許容差 Capacitance Tolerance	副記号 Option	端子記号 Terminal Code	ケースサイズ Case Size

端子記号 Terminal Code

	記号 Code
標準端子 Standard Terminal	なし Blank
短端子 Short Terminal	ST

寸法図 DIMENSIONS

( mm )





# 大形アルミニウム電解コンデンサ

## LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS

MXR

寸法一覧表, 定格リップル電流一覧表 STANDARD SIZE, RATED RIPPLE CURRENT

Cap (μF)	WV D	10					16				
		20	22	25	30	35	20	22	25	30	35
5600							20 × 25; 1.68				
6800		20 × 25; 1.31					20 × 30; 1.80	22 × 25; 1.75			
8200		20 × 30; 1.59					20 × 35; 2.08	22 × 30; 2.00			
10000		20 × 30; 1.88	22 × 25; 1.77				20 × 40; 2.15	22 × 30; 2.10	25 × 25; 2.05		
12000		20 × 35; 2.18	22 × 30; 2.10	25 × 25; 1.94				22 × 35; 2.31	25 × 30; 2.30	30 × 25; 2.30	
15000		20 × 40; 2.27	22 × 35; 2.23	25 × 30; 2.10				22 × 40; 2.68	25 × 35; 2.58	30 × 30; 2.57	
18000			22 × 40; 2.41	25 × 30; 2.34	30 × 25; 2.25			22 × 50; 3.20	25 × 40; 3.16	30 × 30; 2.98	
22000			22 × 45; 2.58	25 × 35; 2.54	30 × 30; 2.50				25 × 45; 3.36	30 × 35; 3.30	35 × 30; 3.25
27000			22 × 50; 3.17	25 × 40; 3.07	30 × 30; 2.95				25 × 50; 3.85	30 × 40; 3.80	35 × 35; 3.93
33000				25 × 45; 3.39	30 × 35; 3.33	35 × 30; 3.21				30 × 45; 4.30	35 × 35; 4.27
39000					30 × 40; 3.70	35 × 35; 3.68				30 × 50; 4.81	35 × 40; 4.80
47000					30 × 45; 4.22	35 × 40; 4.16					35 × 45; 5.53
56000						35 × 45; 5.00					

Cap (μF)	WV D	25					35				
		20	22	25	30	35	20	22	25	30	35
2700							20 × 25; 1.29				
3300							20 × 30; 1.57	22 × 25; 1.45			
3900		20 × 25; 1.58					20 × 35; 1.78	22 × 30; 1.69			
4700		20 × 30; 1.65	22 × 25; 1.61				20 × 40; 2.02	22 × 35; 2.02	25 × 25; 1.62		
5600		20 × 35; 1.85	22 × 30; 1.80					22 × 35; 2.13	25 × 30; 2.00		
6800		20 × 40; 2.11	22 × 35; 2.09	25 × 25; 1.87				22 × 40; 2.41	25 × 35; 2.31	30 × 25; 2.31	
8200			22 × 40; 2.31	25 × 30; 2.34	30 × 25; 2.16			22 × 50; 2.85	25 × 40; 2.73	30 × 30; 2.75	
10000			22 × 45; 2.65	25 × 35; 2.61	30 × 30; 2.61				25 × 45; 3.05	30 × 35; 3.05	
12000			22 × 50; 2.80	25 × 40; 2.81	30 × 30; 2.74				25 × 50; 3.37	30 × 40; 3.23	35 × 30; 3.19
15000				25 × 45; 3.27	30 × 35; 3.13	35 × 30; 3.26				30 × 45; 3.72	35 × 35; 3.67
18000					30 × 40; 3.56	35 × 35; 3.84					35 × 40; 4.37
22000					30 × 45; 4.04	35 × 35; 3.75					35 × 45; 4.92
27000						35 × 45; 4.74					
33000						35 × 50; 5.50					

Cap (μF)	WV D	50					63				
		20	22	25	30	35	20	22	25	30	35
1000							20 × 25; 1.10				
1200							20 × 30; 1.20	22 × 25; 1.20			
1500		20 × 25; 1.15					20 × 35; 1.47	22 × 30; 1.47			
1800		20 × 30; 1.39	22 × 25; 1.34				20 × 35; 1.58	22 × 30; 1.58	25 × 25; 1.52		
2200		20 × 35; 1.60	22 × 30; 1.60				20 × 40; 1.80	22 × 35; 1.82	25 × 30; 1.75		
2700		20 × 35; 1.73	22 × 30; 1.70	25 × 25; 1.70				22 × 40; 2.07	25 × 35; 2.11	30 × 25; 1.72	
3300		20 × 40; 1.97	22 × 35; 1.97	25 × 30; 1.88				22 × 45; 2.33	25 × 35; 2.27	30 × 30; 2.24	
3900			22 × 40; 2.22	25 × 30; 2.20	30 × 25; 1.95				25 × 40; 2.51	30 × 35; 2.55	
4700			22 × 45; 2.43	25 × 35; 2.43	30 × 30; 2.25				25 × 50; 2.97	30 × 40; 2.86	35 × 30; 2.80
5600			22 × 50; 2.75	25 × 40; 2.72	30 × 30; 2.64					30 × 40; 3.22	35 × 35; 3.20
6800				25 × 45; 3.30	30 × 35; 3.30	35 × 30; 3.25				30 × 50; 3.65	35 × 40; 3.65
8200					30 × 40; 3.60	35 × 35; 3.60					35 × 45; 4.04
10000					30 × 50; 4.05	35 × 40; 4.04					35 × 50; 4.48
12000						35 × 45; 4.56					
15000						35 × 50; 4.77					

Cap (μF)	WV D	80					100				
		20	22	25	30	35	20	22	25	30	35
560							20 × 25; 0.95				
680							20 × 30; 1.15	22 × 25; 1.09			
820		20 × 25; 1.04					20 × 35; 1.31	22 × 30; 1.32			
1000		20 × 30; 1.24	22 × 25; 1.19				20 × 35; 1.43	22 × 30; 1.47	25 × 25; 1.45		
1200		20 × 35; 1.43	22 × 30; 1.44				20 × 40; 1.61	22 × 35; 1.69	25 × 30; 1.68		
1500		20 × 35; 1.57	22 × 30; 1.59	25 × 25; 1.59				22 × 40; 1.97	25 × 35; 1.98	30 × 25; 1.95	
1800		20 × 40; 1.77	22 × 35; 1.79	25 × 30; 1.71				22 × 45; 2.23	25 × 40; 2.20	30 × 30; 2.20	
2200			22 × 40; 2.03	25 × 35; 1.98	30 × 25; 1.98				25 × 45; 2.53	30 × 35; 2.55	35 × 30; 2.50
2700			22 × 45; 2.39	25 × 40; 2.35	30 × 30; 2.35				25 × 50; 2.82	30 × 40; 2.86	35 × 35; 2.89
3300				25 × 45; 2.64	30 × 35; 2.61	35 × 30; 2.47				30 × 45; 3.30	35 × 35; 3.25
3900				25 × 50; 2.92	30 × 40; 2.82	35 × 30; 2.97				30 × 50; 3.60	35 × 40; 3.67
4700					30 × 45; 3.34	35 × 35; 3.38					35 × 45; 3.80
5600					30 × 50; 3.80	35 × 40; 3.80					35 × 50; 4.05
6800						35 × 45; 3.90					
8200						35 × 50; 4.20					

↑ リップル電流 Ripple Current A r.m.s./120Hz:105  
 ↑ ケースサイズ Case Size D<sup>±1</sup> × L<sup>±2</sup>(mm)



# 大形アルミニウム電解コンデンサ

## LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS

MXR

寸法一覧表, 定格リップル電流一覧表 STANDARD SIZE, RATED RIPPLE CURRENT

Cap ( $\mu$ F)	WV D	160					180				
		20	22	25	30	35	20	22	25	30	35
220							20 x 25; 0.81				
270		20 x 25; 0.87					20 x 30; 0.95	22 x 25; 0.97			
330		20 x 30; 1.02	22 x 25; 1.03				20 x 35; 1.09	22 x 30; 1.13			
390		20 x 35; 1.15	22 x 30; 1.17				20 x 35; 1.28	22 x 30; 1.32	25 x 25; 1.33		
470		20 x 40; 1.25	22 x 30; 1.28	25 x 25; 1.29			20 x 40; 1.34	22 x 35; 1.39	25 x 30; 1.43		
560			22 x 35; 1.45	25 x 30; 1.49				22 x 40; 1.56	25 x 30; 1.53	30 x 25; 1.56	
680			22 x 40; 1.64	25 x 35; 1.70	30 x 25; 1.63			22 x 45; 1.76	25 x 35; 1.76	30 x 30; 1.74	
820			22 x 45; 1.85	25 x 40; 1.92	30 x 30; 1.91			22 x 50; 1.97	25 x 40; 1.99	30 x 30; 1.93	
1000				25 x 45; 2.17	30 x 35; 2.19				25 x 45; 2.24	30 x 35; 2.24	35 x 30; 2.20
1200				25 x 50; 2.43	30 x 40; 2.48	35 x 30; 2.25				30 x 40; 2.53	35 x 35; 2.54
1500					30 x 45; 2.82	35 x 35; 2.62				30 x 50; 3.03	35 x 40; 2.91
1800					30 x 50; 3.13	35 x 40; 2.97					35 x 45; 3.25
2200						35 x 45; 3.34					35 x 50; 3.62

Cap ( $\mu$ F)	WV D	200					220				
		20	22	25	30	35	20	22	25	30	35
180							20 x 25; 0.81				
220		20 x 25; 0.83					20 x 30; 0.94	22 x 25; 0.94			
270		20 x 30; 0.97	22 x 25; 0.99				20 x 35; 1.10	22 x 30; 1.09			
330		20 x 35; 1.17	22 x 30; 1.20	25 x 25; 1.20			20 x 40; 1.18	22 x 35; 1.24	25 x 25; 1.14		
390		20 x 40; 1.27	22 x 35; 1.30	25 x 30; 1.34			20 x 45; 1.33	22 x 35; 1.30	25 x 25; 1.26		
470			22 x 40; 1.44	25 x 30; 1.44	30 x 25; 1.48			22 x 40; 1.41	25 x 30; 1.39	30 x 25; 1.37	
560			22 x 45; 1.60	25 x 35; 1.60	30 x 30; 1.60			22 x 45; 1.60	25 x 35; 1.56	30 x 30; 1.61	35 x 25; 1.52
680			22 x 50; 1.75	25 x 40; 1.76	30 x 30; 1.74				25 x 40; 1.75	30 x 35; 1.76	35 x 30; 1.72
820				25 x 45; 2.10	30 x 35; 2.11	35 x 30; 2.10			25 x 45; 1.97	30 x 40; 2.06	35 x 30; 1.95
1000				25 x 50; 2.36	30 x 40; 2.40	35 x 35; 2.30				30 x 45; 2.44	35 x 35; 2.20
1200					30 x 45; 2.69	35 x 35; 2.53					35 x 40; 2.37
1500						35 x 40; 2.97					35 x 45; 2.64
1800						35 x 50; 3.45					

Cap ( $\mu$ F)	WV D	250					315				
		20	22	25	30	35	20	22	25	30	35
82							20 x 25; 0.39				
100							20 x 30; 0.45				
120							20 x 30; 0.54	22 x 25; 0.56			
150		20 x 25; 0.71					20 x 35; 0.64	22 x 30; 0.66	25 x 25; 0.65		
180		20 x 30; 0.82	22 x 25; 0.84				20 x 40; 0.75	22 x 35; 0.78	25 x 30; 0.71		
220		20 x 35; 0.95	22 x 30; 0.97	25 x 25; 0.99				22 x 40; 0.89	25 x 30; 0.85	30 x 25; 0.83	
270		20 x 40; 1.08	22 x 35; 1.11	25 x 30; 1.15				22 x 45; 1.01	25 x 35; 0.98	30 x 30; 1.01	
330			22 x 40; 1.26	25 x 30; 1.26	30 x 25; 1.31			22 x 50; 1.14	25 x 40; 1.12	30 x 35; 1.21	
390			22 x 45; 1.41	25 x 35; 1.42	30 x 30; 1.50				25 x 45; 1.31	30 x 35; 1.30	35 x 30; 1.23
470			22 x 50; 1.58	25 x 40; 1.61	30 x 30; 1.61					30 x 40; 1.53	35 x 35; 1.47
560				25 x 45; 1.80	30 x 35; 1.84					30 x 45; 1.65	35 x 40; 1.66
680				25 x 50; 2.03	30 x 40; 2.09	35 x 30; 1.96					35 x 45; 1.96
820					30 x 45; 2.35	35 x 35; 2.26					35 x 50; 2.19
1000					30 x 50; 2.64	35 x 40; 2.57					
1200						35 x 45; 2.88					

Cap ( $\mu$ F)	WV D	350					385				
		20	22	25	30	35	20	22	25	30	35
56							20 x 25; 0.37				
68		20 x 25; 0.41					20 x 30; 0.44	22 x 25; 0.45			
82		20 x 30; 0.45					20 x 30; 0.50	22 x 30; 0.52			
100		20 x 30; 0.51	22 x 25; 0.53				20 x 35; 0.56	22 x 30; 0.58	25 x 25; 0.57		
120		20 x 35; 0.59	22 x 30; 0.61	25 x 25; 0.62			20 x 40; 0.66	22 x 35; 0.68	25 x 30; 0.68		
150		20 x 40; 0.70	22 x 35; 0.73	25 x 30; 0.73				22 x 40; 0.79	25 x 30; 0.78	30 x 25; 0.75	
180			22 x 40; 0.83	25 x 30; 0.80	30 x 25; 0.81			22 x 45; 0.89	25 x 35; 0.86	30 x 30; 0.88	
220			22 x 45; 0.94	25 x 35; 0.92	30 x 30; 0.98			22 x 50; 1.01	25 x 40; 1.00	30 x 30; 1.00	
270			22 x 50; 1.07	25 x 40; 1.05	30 x 30; 1.03				25 x 45; 1.13	30 x 40; 1.14	35 x 30; 1.10
330				25 x 45; 1.24	30 x 35; 1.24	35 x 30; 1.18				30 x 45; 1.31	35 x 35; 1.32
390				25 x 50; 1.38	30 x 40; 1.39	35 x 35; 1.39				30 x 50; 1.48	35 x 40; 1.48
470					30 x 45; 1.57	35 x 35; 1.50					35 x 45; 1.76
560					30 x 50; 1.75	35 x 40; 1.69					35 x 50; 1.95
680						35 x 45; 1.96					

↑ ↑ リプル電流 Ripple Current A r.m.s./120Hz-105  
 ケースサイズ Case Size  $D^{\pm 1} \times L^{\pm 2}$ (mm)



# 大形アルミニウム電解コンデンサ

## LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS

MXR

### 寸法一覧表, 定格リップル電流一覧表 STANDARD SIZE, RATED RIPPLE CURRENT

Cap ( $\mu$ F)	WV D	400					420					
		20	22	25	30	35	20	22	25	30	35	
56	20 x 25; 0.40						20 x 25; 0.40					
68	20 x 30; 0.48	22 x 25; 0.49					20 x 30; 0.48	22 x 25; 0.50				
82	20 x 30; 0.54	22 x 30; 0.56					20 x 35; 0.53	22 x 30; 0.56	25 x 25; 0.56			
100	20 x 35; 0.60	22 x 30; 0.62	25 x 25; 0.61				20 x 35; 0.58	22 x 30; 0.63	25 x 25; 0.63			
120	20 x 40; 0.71	22 x 35; 0.73	25 x 30; 0.73				20 x 45; 0.71	22 x 35; 0.73	25 x 30; 0.72	30 x 25; 0.75		
150		22 x 40; 0.85	25 x 35; 0.85	30 x 25; 0.79				22 x 45; 0.86	25 x 35; 0.83	30 x 25; 0.83		
180		22 x 45; 0.95	25 x 35; 0.92	30 x 30; 0.95				22 x 50; 1.02	25 x 40; 0.94	30 x 30; 0.95	35 x 25; 0.90	
220		22 x 50; 1.08	25 x 40; 1.05	30 x 35; 1.24					25 x 45; 1.13	30 x 35; 1.09	35 x 30; 1.05	
270			25 x 50; 1.29	30 x 40; 1.30	35 x 30; 1.18				25 x 50; 1.37	30 x 40; 1.25	35 x 35; 1.25	
330				30 x 45; 1.47	35 x 35; 1.41					30 x 45; 1.49	35 x 35; 1.42	
390				30 x 50; 1.64	35 x 40; 1.59					30 x 50; 1.67	35 x 40; 1.61	
470					35 x 45; 1.87						35 x 45; 1.86	
560					35 x 50; 2.09							

Cap ( $\mu$ F)	WV D	450				
		20	22	25	30	35
47	20 x 25; 0.36					
56	20 x 30; 0.41	22 x 25; 0.42				
68	20 x 35; 0.47	22 x 30; 0.50	25 x 25; 0.50			
82	20 x 40; 0.53	22 x 35; 0.56	25 x 30; 0.57			
100		22 x 40; 0.64	25 x 30; 0.63	30 x 25; 0.67		
120		22 x 45; 0.72	25 x 35; 0.71	30 x 30; 0.77		
150		22 x 50; 0.80	25 x 40; 0.82	30 x 30; 0.85		
180			25 x 45; 0.93	30 x 35; 0.97		
220			25 x 50; 1.05	30 x 40; 1.10	35 x 30; 1.01	
270				30 x 45; 1.25	35 x 35; 1.26	
330				30 x 50; 1.42	35 x 40; 1.44	
390					35 x 45; 1.61	
470					35 x 50; 1.80	

↑ ↑ リプル電流 Ripple Current A r.m.s./120Hz-105  
 ケースサイズ Case Size D<sup>±1</sup> × L<sup>±2</sup>(mm)

### リップル電流補正係数 MULTIPLIER FOR RIPPLE CURRENT

(1) 温度係数 Temperature coefficient

周囲温度( ) Ambient Temperature( )	105	85	65
係数 Coefficient	1.0	1.7	2.1

(2) 周波数係数 Frequency coefficient

周波数( Hz ) Frequency	60( 50 )	120	500	1k	10k	
係数 Coefficient	10 ~ 100WV	0.90	1.00	1.05	1.10	1.15
	160 ~ 250WV	0.80	1.00	1.10	1.14	1.18
	315 ~ 450WV	0.80	1.00	1.05	1.10	1.15