

MG series

- Lower impedance at high frequency range.
- Smaller case size and high ripple current.
- RoHS Compliance.
- 較低阻抗於高頻範圍。
- 較小體積於高紋波電流。



MG

SPECIFICATIONS

Items 項目	Characteristics 特性					
Capacitance Tolerance 靜電容量誤差	±20% (120Hz, 20°C)					
Operating Temperature Range 適用溫度範圍	-40 ~ +105°C					
Rated Voltage Range 工作電壓範圍	6.3 ~ 35V					
Leakage Current 洩漏電流	$I \leq 0.01CV$ or $3\mu A$ (After 2 minutes application of DC working voltage, at 20°C)					
Dissipation Factor 散逸因素 (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C					
	Rated Voltage (V)	6.3	10	16	25	35
	tan δ (Max)	0.21	0.18	0.15	0.13	0.11
When nominal capacitance exceeds 1000 μF , add 0.02 to the value above for each 1000 μF increase. (20°C · 120Hz)						
Low Temperature Stability 低溫特性 Impedance Ratio (Max) 阻抗比率 (最大值)	Measurement Frequency: 120Hz					
	Rated Voltage (V)	6.3	10	16	25	35
	Z (-25°C) / Z (20°C)	2	2	2	2	2
	Z (-40°C) / Z (20°C)	3	3	3	3	3
Load Life 負荷壽命	6,000hours, with application of working voltage at 105°C ($\phi D \leq 6.3$ mm, 5,000hrs)					
	Capacitance Change	Within ±25% of Initial Value				
	tan δ	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Shelf Life 放置壽命	1,000hours, no voltage applied, at 105°C · After Test : U_R to be applied for 30 minutes, 24 to 48hours before measurement.					
	Capacitance Change	Within ±20% of Initial Value				
	tan δ	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Standards 參照標準	JIS C 5101-4-1 and JIS C 5101-2					

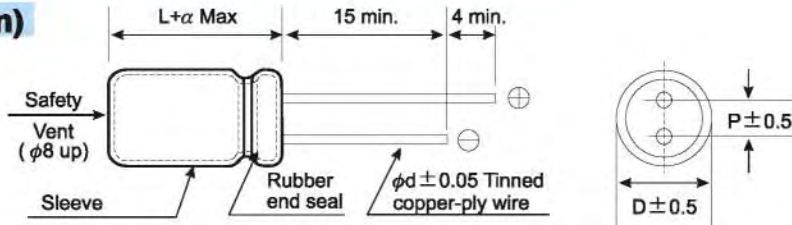
PERMISSIBLE RIPPLE CURRENT

Frequency Coefficient

Capacitance (μF)	Frequency (Hz)			
	120	1K	10K	100K
47 ~ 150	0.40	0.75	0.90	1.00
220 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1800	0.60	0.87	0.95	1.00
2200 ~ 3900	0.75	0.90	0.95	1.00
4700 ~ 8200	0.85	0.95	0.98	1.00

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DIMENSIONS (mm)



ϕD	5	6.3	8	10	13	16
P	2.0	2.5	3.5	5.0	5.0	7.5
ϕd	0.5	0.5	0.5	0.6	0.6	0.8

α	(L < 16) 1.0 (L ≥ 16) 2.0
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STANDARD RATINGS

DxL (mm); R.C.: (mA rms) at 105°C, 100KHz; IMP: (Ω max) at 20°C, 100KHz.

Cap (μF)	WV(V)(Code) Item	6.3 (0J)				10 (1A)				16 (1C)			
		D x L	IMP		R.C.	D x L	IMP		R.C.	D x L	IMP		R.C.
			20°C	-10°C			20°C	-10°C			20°C	-10°C	
100										5x11	0.230	0.760	360
150					5x11	0.230	0.760	360		6.3x11	0.100	0.330	450
220		5x11	0.230	0.760	360	6.3x11	0.100	0.330	450	6.3x11	0.100	0.330	550
330		6.3x11	0.100	0.330	460	6.3x11	0.100	0.330	550	8x12	0.059	0.181	830
470		6.3x11	0.100	0.330	550	8x12	0.059	0.181	820	8x12	0.059	0.181	990
680		8x12	0.059	0.181	900	8x12	0.059	0.181	990	8x16	0.046	0.143	1330
820		8x12	0.059	0.181	990	10x13	0.043	0.133	1250	10x16	0.030	0.095	1650
1000		10x13	0.043	0.133	1250	8x16	0.046	0.143	1330	8x20	0.031	0.105	1550
1200		10x13	0.043	0.133	1360	10x13	0.043	0.133	1360	10x16	0.030	0.095	1815
1500		8x20	0.031	0.105	1550	10x16	0.030	0.095	1650	10x20	0.019	0.057	1930
1800		10x16	0.030	0.095	1815	8x20	0.031	0.105	1550	10x20	0.019	0.057	2160
2200		10x20	0.019	0.057	2160	10x16	0.030	0.095	1815	10x25	0.017	0.051	2475
2700		10x25	0.017	0.051	2475	10x20	0.019	0.057	2160	10x25	0.017	0.051	2725
3300		13x21	0.016	0.041	2500	10x25	0.017	0.051	2475	13x21	0.016	0.041	2725
3900		13x21	0.016	0.041	2725	13x21	0.016	0.041	2725	13x21	0.016	0.041	2725
4700		13x25	0.014	0.036	3190	13x25	0.014	0.036	3190	13x25	0.014	0.036	3190
5600		13x30	0.012	0.031	3795	13x25	0.014	0.036	3190	13x25	0.014	0.036	3190
6800		13x35	0.011	0.029	3925	13x30	0.012	0.031	3795	13x30	0.012	0.031	3795
8200		16x22	0.014	0.036	3575	16x22	0.014	0.036	3575	16x22	0.014	0.036	3575
		16x26	0.012	0.033	3990	13x35	0.011	0.029	3925	16x22	0.014	0.036	3575
						16x26	0.012	0.033	3990	13x35	0.011	0.029	3925
										16x26	0.012	0.033	3990

Cap (μF)	WV(V)(Code) Item	25 (1E)				35 (1V)			
		D x L	IMP		R.C.	D x L	IMP		R.C.
			20°C	-10°C			20°C	-10°C	
47					5x11	0.230	0.760	360	
68		5x11	0.230	0.760	360	6.3x11	0.100	0.330	450
100		6.3x11	0.100	0.330	450	6.3x11	0.100	0.330	550
150		8x12	0.100	0.330	550	8x12	0.059	0.181	820
220		8x12	0.059	0.181	810	8x12	0.059	0.181	990
270		8x12	0.059	0.181	900	8x16	0.046	0.143	1330
330		8x12	0.059	0.181	990	10x13	0.043	0.133	1360
390		8x16	0.046	0.143	1330	8x20	0.031	0.105	1550
470		10x13	0.043	0.133	1360	10x16	0.030	0.095	1815
560		8x20	0.031	0.105	1550	10x20	0.019	0.057	2160
680		10x16	0.030	0.095	1815	10x25	0.017	0.051	2475
820		10x20	0.019	0.057	2160	13x21	0.016	0.041	2725
1000		10x25	0.017	0.051	2475	13x21	0.016	0.041	2920
1200		13x21	0.016	0.041	2180	13x25	0.014	0.041	3190
1500		13x21	0.016	0.041	2725	13x30	0.012	0.031	3795
1800		13x25	0.014	0.036	3190	16x22	0.014	0.036	3575
2200		13x30	0.012	0.031	3795	13x35	0.011	0.029	3925
2700		16x22	0.014	0.036	3575	16x26	0.012	0.033	3990
3300		13x35	0.011	0.029	3925				
		16x26	0.012	0.033	3990				

※ 13mm may be replaced by 12.5mm upon customer's request.