MG series

- 105℃ 5000 hours~6000 hours,Low impedance at high frequency range
- Smaller case size and high ripple current
- RoHS Compliance
- 105℃ 5000小時~6000小時,高頻超低阻抗
- 小尺寸高紋波電流

SPECIFICATIONS

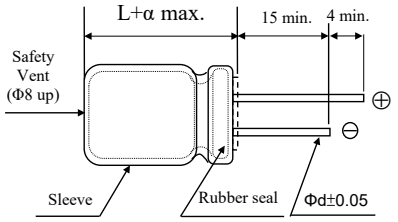
Items 項 目	Characteristics 特 性					
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20℃)					
Operating Temperature Range 適用溫度範圍	-40 ~ +105℃					
Rated Voltage Range 額定電壓範圍	6.3 ~ 35VDC					
Leakage Current 洩漏電流	I ≦ 0.01CV or 3(μA) which is greater.(After 2 minutes application of DC rated voltage, at 20℃)					
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20℃					
	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 over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.					
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℃)/Z(20℃)	2	2	2	2	2
	Z(-40℃)/Z(20℃)	3	2	2	3	3
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple currrent is applied for 6,000 hours (ΦD≦6.3:5,000 hours) at 105℃.					
	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	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.					
	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	IEC 60384-4(JIS C5101-4)					

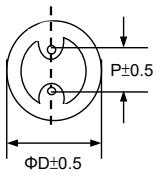
Frequency Coefficient of Permissible Ripple Current

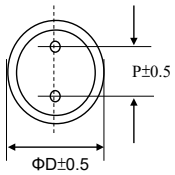
Capacitance (μF)	Frequency (Hz)			
	120	1K	10K	100K
47 ~ 150	0.40	0.75	0.90	1.00
220 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1800	0.60	0.87	0.95	1.00
2200 ~ 3900	0.75	0.90	0.95	1.00
4700 ~ 8200	0.85	0.95	0.98	1.00

MG series

DIMENSIONS(mm)







ΦD	5	6.3	8	10	12.5	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 < 20) 1.5
	(L ≧ 20) 2.0

STANDARD RATINGS

DxL(mm), R.C：(mA rms) at 105℃ 100kHz , IMP:(Ω max) at 20℃,100kHz.

Cap (μF)	V	6.3				10				16			
	Item	D x L	IMP 20℃	IMP -10℃	R.C.	D x L	IMP 20℃	IMP -10℃	R.C	D x L	IMP 20℃	IMP -10℃	R.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			0.100	0.330	460	6.3x11	0.100	0.330	550	8x11.5	0.059	0.181	830
470			0.100	0.330	550	8x11.5	0.059	0.181	820	8x11.5	0.059	0.181	990
680		8x11.5	0.059	0.181	900	8x11.5	0.059	0.181	990	8x15	0.046	0.143	1330
										10x12.5	0.043	0.133	1360
820		8x11.5	0.059	0.181	990	10x12.5	0.043	0.133	1250	10x16	0.030	0.095	1650
1000		10x12.5	0.043	0.133	1250	8x15	0.046	0.143	1330	8x20	0.031	0.105	1550
						10x12.5	0.043	0.133	1360	10x16	0.030	0.095	1815
1200		8x15	0.046	0.143	1300	10x16	0.030	0.095	1650	10x20	0.019	0.057	1930
		10x12.5	0.043	0.133	1360								
1500		8x20	0.031	0.105	1550	8x20	0.031	0.105	1550	10x20	0.019	0.057	2160
						10x16	0.030	0.095	1815				
1800		10x16	0.030	0.095	1815	10x20	0.019	0.057	2160	10x25	0.017	0.051	2475
2200		10x20	0.019	0.057	2160	10x25	0.017	0.051	2450	12.5x20	0.017	0.043	2725
2700		10x25	0.017	0.051	2475	12.5x20	0.016	0.041	2475	12.5x25	0.015	0.038	3190
3300		12.5x20	0.016	0.041	2500	12.5x20	0.016	0.041	2725	12.5x30	0.013	0.033	3795
										16x22	0.015	0.038	3575
3900		12.5x20	0.016	0.041	2725	12.5x25	0.014	0.036	3190	12.5x35	0.011	0.029	3925
4700		12.5x25	0.014	0.036	3190	12.5x30	0.012	0.031	3795	16x25	0.012	0.033	3990
						16x22	0.014	0.036	3575				
5600		12.5x30	0.012	0.031	3795	12.5x35	0.011	0.029	3925				
6800		12.5x35	0.011	0.029	3925	16x25	0.012	0.033	3990				
		16x22	0.014	0.036	3575								
8200		16x25	0.012	0.033	3990								

Cap (μF)	V	25				35			
	Item	D x L	IMP 20℃	IMP -10℃	R.C	D x L	IMP 20℃	IMP -10℃	R.C
47						5x11	0.230	0.760	360
68		5x11	0.230	0.076	360	6.3x11	0.100	0.330	450
100		6.3x11	0.100	0.033	450	6.3x11	0.100	0.330	550
150		8x11.5	0.100	0.033	550	8x11.5	0.059	0.181	820
220		8x11.5	0.059	0.181	810	8x11.5	0.059	0.181	990
270		8x11.5	0.059	0.181	900	8x15	0.046	0.143	1330
330		8x11.5	0.059	0.181	990	10x12.5	0.043	0.133	1360
390		8x15	0.046	0.143	1330	8x20	0.031	0.105	1550
470		10x12.5	0.043	0.133	1360	10x16	0.030	0.095	1815
560		8x20	0.032	0.110	1550	10x20	0.030	0.095	2160
680		10x16	0.031	0.100	1815	10x25	0.027	0.080	2475
820		10x20	0.020	0.062	2160	12.5x20	0.022	0.066	2725
1000		10x25	0.018	0.055	2475	12.5x20	0.019	0.057	2920
1200		12.5x20	0.017	0.059	2650	12.5x25	0.017	0.052	3190
1500		12.5x20	0.017	0.059	2725	12.5x30	0.015	0.051	3795
						16x22	0.018	0.054	3575
1800		12.5x25	0.015	0.038	3190	12.5x35	0.011	0.029	3925
2200		12.5x30	0.012	0.031	3795	16x25	0.012	0.033	3990
		16x22	0.014	0.036	3575				
2700		12.5x35	0.011	0.029	3925				
3300		16x25	0.012	0.033	3990				