

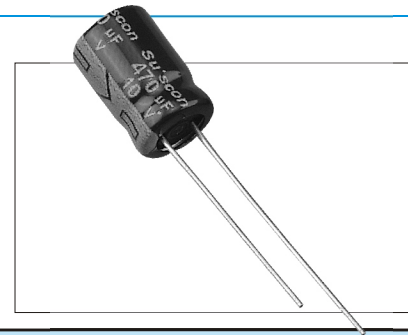
## MG series

Lower impedance at high frequency range.

Smaller case size and high ripple current.

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	$I \leq 0.01CV$ (After 2 minutes application of DC working voltage, at 20 C)					
Dissipation Factor 散逸因素 (tan)	Measurement Frequency: 120Hz. Temperature: 20 C					
	Rated Voltage (V)	6.3	10	16	25	35
	tan (Max)	0.21	0.18	0.15	0.13	0.11
When nominal capacitance exceeds 1000 F, add 0.02 to the value above for each 1000 F increase. (20 C · 120Hz)						
Low Temperature Stability 低溫特性 Impedance Ratio (Max) 阻抗比率 (最大值)	Measurement Frequency: 120Hz, Temperature: 20 C.					
	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 ( $D \leq 6.3$ mm, 5,000hrs)					
	Capacitance Change	Within ±25% of Initial Value				
	tan	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	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Standards 參照標準	JIS C 5141 and JIS C 5102					

### PERMISSIBLE RIPPLE CURRENT

#### Temperature Coefficient

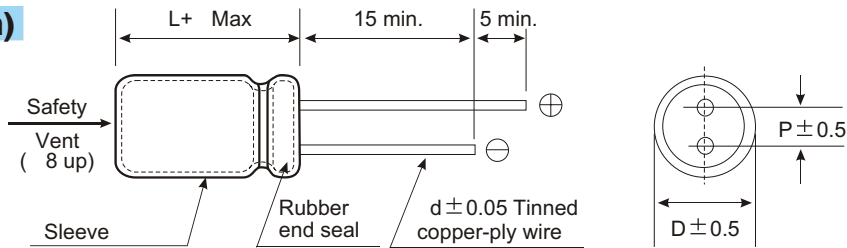
TEMP ( C )	65	75	85	95	105
Coefficient	2.10	1.90	1.70	1.50	1.00

#### Frequency Coefficient

Capacitance ( F )	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)



D	5	6.3	8	10	13(12.5)	16
P	2.0	2.5	3.5	5.0	5.0	7.5
d	0.5	0.5	0.5	0.6	0.6	0.8

$\alpha$	(L < 16) 1.0
	(L ≥ 16) 2.0

## STANDARD RATINGS

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

Cap (F)	WV(V) Item	6.3				10				16			
		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													
150					5 x 11	0.230	0.760	360	5 x 11	0.230	0.760	360	
220		5 x 11	0.230	0.760	360	6.3 x 11	0.100	0.330	450	6.3 x 11	0.100	0.330	450
330		6.3 x 11	0.100	0.330	460	6.3 x 11	0.100	0.330	550	8 x 12	0.059	0.181	830
470		6.3 x 11	0.100	0.330	550	8 x 12	0.059	0.181	820	8 x 12	0.059	0.181	990
680		8 x 12	0.059	0.181	900	8 x 12	0.059	0.181	990	10 x 13	0.043	0.133	1360
820		8 x 12	0.059	0.181	990	10 x 13	0.043	0.133	1250	8 x 16	0.046	0.143	1330
1000		10 x 13	0.043	0.133	1250	10 x 13	0.043	0.133	1360	10 x 16	0.030	0.095	1650
1200		10 x 13	0.043	0.133	1360	8 x 16	0.046	0.143	1330	8 x 20	0.031	0.105	1550
1500		8 x 21	0.031	0.105	1550	10 x 16	0.030	0.095	1650	10 x 20	0.019	0.057	1930
1800		10 x 16	0.030	0.095	1815	8 x 20	0.031	0.105	1550	10 x 20	0.019	0.057	2160
2200		10 x 20	0.019	0.057	2160	10 x 20	0.019	0.057	2160	10 x 25	0.017	0.051	2475
2700		10 x 25	0.017	0.051	2475	10 x 25	0.017	0.051	2475	13 x 21	0.016	0.041	2725
3300		13 x 21	0.016	0.041	2500	13 x 21	0.016	0.041	2725	13 x 25	0.014	0.036	3190
3900		13 x 21	0.016	0.041	2725	13 x 25	0.014	0.036	3190	13 x 30	0.012	0.031	3795
4700		13 x 25	0.014	0.036	3190	13 x 25	0.014	0.036	3190	16 x 21	0.014	0.036	3575
5600		13 x 30	0.012	0.031	3795	13 x 36	0.011	0.029	3925	16 x 26	0.012	0.033	3990
6800		13 x 36	0.011	0.029	3925	16 x 26	0.012	0.033	3990				
8200		16 x 26	0.012	0.033	3990								

Cap (F)	WV(V) Item	25				35							
		D x L	IMP		R.C.	D x L	IMP		R.C.				
			20 C	-10 C			20 C	-10 C					
47													
68		5 x 11	0.230	0.760	360	5 x 11	0.230	0.760	360	6.3 x 11	0.100	0.330	450
100		6.3 x 11	0.100	0.330	450	6.3 x 11	0.100	0.330	550	6.3 x 11	0.100	0.330	550
150		8 x 12	0.100	0.330	550	8 x 12	0.059	0.181	820	8 x 12	0.059	0.181	820
220		8 x 12	0.059	0.181	810	8 x 12	0.059	0.181	990	8 x 12	0.059	0.181	990
270		8 x 12	0.059	0.181	900	8 x 16	0.046	0.143	1330	8 x 16	0.046	0.143	1330
330		8 x 12	0.059	0.181	990	10 x 13	0.043	0.133	1360	10 x 13	0.043	0.133	1360
390		8 x 15	0.046	0.143	1330	8 x 20	0.031	0.105	1550	8 x 20	0.031	0.105	1550
470		10 x 13	0.043	0.133	1360	10 x 16	0.030	0.095	1650	10 x 16	0.030	0.095	1650
560		8 x 20	0.031	0.105	1550	10 x 20	0.019	0.057	2160	10 x 20	0.019	0.057	2160
680		10 x 16	0.030	0.095	1815	10 x 25	0.017	0.051	2475	10 x 25	0.017	0.051	2475
820		10 x 20	0.019	0.057	2160	13 x 21	0.016	0.041	2725	13 x 21	0.016	0.041	2725
1000		10 x 25	0.017	0.051	2475	13 x 21	0.016	0.041	2725	13 x 21	0.016	0.041	2725
1200		13 x 21	0.016	0.041	2180	13 x 25	0.014	0.036	3190	13 x 25	0.014	0.036	3190
1500		13 x 21	0.016	0.041	2725	13 x 32	0.012	0.031	3795	13 x 32	0.012	0.031	3795
1800		13 x 25	0.014	0.036	3190	16 x 21	0.014	0.036	3575	16 x 21	0.014	0.036	3575
2200		13 x 30	0.012	0.031	3795	16 x 26	0.012	0.033	3990	16 x 26	0.012	0.033	3990
2700		16 x 21	0.014	0.036	3575								
3300		13 x 36	0.011	0.029	3925								
		16 x 26	0.012	0.033	3990								

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