

MS Series

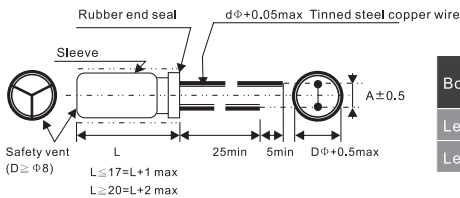
• 105°C, 2000 hours standard series (紋波疊加)



• SPECIFICATIONS

Items	Characteristics						
Category Temperature Range	-40 to +105°C						
Rated Voltage Range	160V to 450Vdc						
Capacitance Tolerance	± 20% (M) (at 20°C, 120Hz)						
Leakage Current	I=0.01CV + 3 μA or 3mA MAX, whichever is greater. Where, I :Max. Leakage current (μA). C: Nominal capacitance (μF) .V :Rated voltage(V) (at 20°C, after 2 minutes)						
Dissipation Factor (tan δ)	Rated voltage (Vdc)	160V	200V	250V	350V	400V	450V
	tan δ (Max.)	0.15	0.15	0.15	0.20	0.20	0.22
Low Temperature Characteristics	Impedance ration max at 120Hz						
	Working voltage	160v	200v	250v	350v	400v	450v
	Z-25°C/ Z+20°C	2	2	3	5	5	6
Load. Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the voltage is applied for 2000 hours at 105°C						
	Capacitance change	≤±20% of the initial value					
	DF (tan δ)	≤200 % of the initial specified value					
	Leakage current	≤The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C without voltage applied.						
	Capacitance change	≤±20% of the initial value					
	DF (tan δ)	≤200 % of the initial specified value					
	Leakage current	≤The initial specified value					
Ripple Current Multiplier	Temperature coefficient						
	Temperature(°C)	~55	60	70	85	105	
	Factor	2.23	2.17	2.0	1.75	1	
	Frequency coefficient						
	cap	freq	60	120	1K	10K	
	~100		0.70	1.0	1.4	1.50	
100up		0.75	1.0	1.3	1.35		

• Diagram: (Unit: mm)



Body Dia ΦD	5	6	8	10	13		16	18	22
	L ≤ 21		L ≥ 25						
Lead Dia φd	0.5		0.6	0.6	0.8	0.8	0.8	0.8	0.8
Lead Space A	2.0	2.5	3.5	5		7.5	7.5/10	10	



● STANDARD RATING

Vdc CAP(μF)	160v		200v		250v		350v		400v		450v	
	D*L	120Hz	D*L	120Hz	D*L	120Hz	D*L	120Hz	D*L	120Hz	D*L	120Hz
0.47	5*11	12	5*11	12	5*11	12	6.3*11	15	6.3*11	15	6.3*11	15
1	5*11	17	6.3*11	17	6.3*11	17	6.3*11	22	8*12	22	8*12	22
2.2	6.3*11	33	6.3*11	33	8*12	36	8*12	39	8*12	39	8*12	39
3.3	8*12	36	8*12	36	8*12	43	8*12	43	8*12	43	10*13	55
4.7	8*12	48	8*12	51	8*12	51	8*12	63	8*12	69	10*17	85
10	8*12	83	10*16	100	10*16	110	10*16	110	10*17	110	10*20	130
22	10*16	130	10*20	175	10*20	220	13*21	235	13*20	240	13*25	240
33	10*20	190	13*20	250	13*21	280	13*21	295	16*20	320	16*25	325
47	13*21	265	13*20	260	13*25	290	16*20	350	16*25	350	16*25	420
68	13*25	360	13*25	370	16*25	420	16*25	440	16*32	450		
100	13*30	425	16*25	490	16*32	530	18*32	530	18*32	530		
150	16*25	610	16*32	660	18*32	710	22*30	725	22*30	740		
180	16*25	720	18*36	780	18*40	810						
220	16*32	750	18*36 22*30	835	18*40	910						
330	18*32	865	18*36 22*37	900 1050								
470	18*36	1,150	22*40	1,200								

Ripple Current :mA/rms at 105°C

- Chip Type SMD
- Miniature Type
- General Purpose
- High Frequency Low Impedance
- High Voltage High Reliability
- Non-polar Type
- Large Size Snap-in
- Large Size Screw
- X Metallized Polypropylene Film Capacitors