

MS7 SERIES
85°C 7mm Height

*Load Life : 85°C 1000 hours.

 RoHS
compliance

◆SPECIFICATIONS

Items	Characteristics																																							
Category Temperature Range	-40~+85℃																																							
Rated Voltage Range	4~63Vdc																																							
Capacitance Tolerance	±20% (20℃,120Hz)																																							
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)																																							
Dissipation Factor(MAX) (tanδ)	<table><tr><td>Rated Voltage (Vdc)</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>tanδ</td><td>0.35</td><td>0.24</td><td>0.20</td><td>0.17</td><td>0.15</td><td>0.13</td><td>0.10</td><td>0.10</td></tr></table> (20℃,120Hz)										Rated Voltage (Vdc)	4	6.3	10	16	25	35	50	63	tanδ	0.35	0.24	0.20	0.17	0.15	0.13	0.10	0.10												
Rated Voltage (Vdc)	4	6.3	10	16	25	35	50	63																																
tanδ	0.35	0.24	0.20	0.17	0.15	0.13	0.10	0.10																																
Endurance	After applying rated voltage with rated ripple current for 1000 hrs at 85℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td colspan="9">Within ±20% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td colspan="9">Not more than 200% of the specified value.</td></tr><tr><td>Leakage Current</td><td colspan="9">Not more than the specified value.</td></tr></table>										Capacitance Change	Within ±20% of the initial value.									Dissipation Factor	Not more than 200% of the specified value.									Leakage Current	Not more than the specified value.								
Capacitance Change	Within ±20% of the initial value.																																							
Dissipation Factor	Not more than 200% of the specified value.																																							
Leakage Current	Not more than the specified value.																																							
Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (Vdc)</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>7</td><td>4</td><td>3</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>15</td><td>10</td><td>8</td><td>6</td><td>4</td><td>4</td><td>4</td><td>4</td></tr></table> (120Hz)										Rated Voltage (Vdc)	4	6.3	10	16	25	35	50	63	Z(-25℃)/Z(20℃)	7	4	3	3	2	2	2	2	Z(-40℃)/Z(20℃)	15	10	8	6	4	4	4	4			
Rated Voltage (Vdc)	4	6.3	10	16	25	35	50	63																																
Z(-25℃)/Z(20℃)	7	4	3	3	2	2	2	2																																
Z(-40℃)/Z(20℃)	15	10	8	6	4	4	4	4																																

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency (Hz)	60(50)	120	500	1k	10k≤
Coefficient					
1μF	0.50	1.00	1.20	1.30	1.50
2.2~4.7μF	0.65	1.00	1.20	1.30	1.50
10~47μF	0.80	1.00	1.20	1.30	1.50
100~470μF	0.80	1.00	1.10	1.15	1.20

◆OPTION

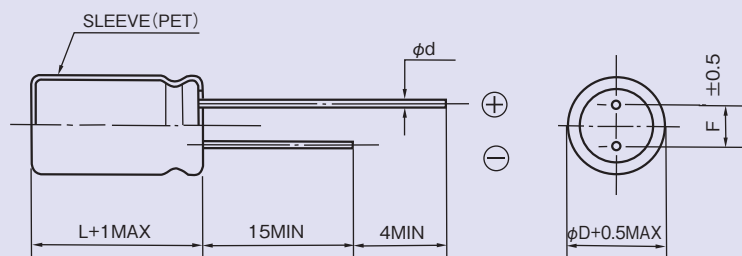
	Code
PET Sleeve	EFC

◆PART NUMBER

Rated Voltage	MS7 Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆DIMENSIONS

(mm)



ϕD	4	5	6.3	8
ϕd	0.45			
F	1.5	2.0	2.5	3.5

◆STANDARD SIZE

 Size $\phi D \times L$ (mm), Rated Ripple Current (mA r.m.s./85°C, 120Hz)

Cap (μF) \ Vdc	4		6.3		10		16	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
10							4×7	28
22			4×7	34	4×7	38	4×7	42
33	4×7	33	4×7	42	4×7	46	5×7	62
47	4×7	39	4×7	50	5×7	66	5×7	73
100	5×7	65	5×7	87	6.3×7	99	6.3×7	110
220	6.3×7	110	6.3×7	133	8×7	165	8×7	145
330	8×7	165	8×7	180	8×7	210		
470	8×7	190						

Cap (μF) \ Vdc	25		35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1					4×7	12	4×7	12
2.2					4×7	16	4×7	16
3.3			4×7	18	4×7	19	5×7	24
4.7	4×7	21	4×7	22	4×7	24	6.3×7	33
10	4×7	31	5×7	32	5×7	42	6.3×7	45
22	5×7	55	6.3×7	60	6.3×7	64		
33	6.3×7	66	6.3×7	73	8×7	75		
47	6.3×7	80	8×7	95	8×7	85		
100	8×7	115	8×7	115				