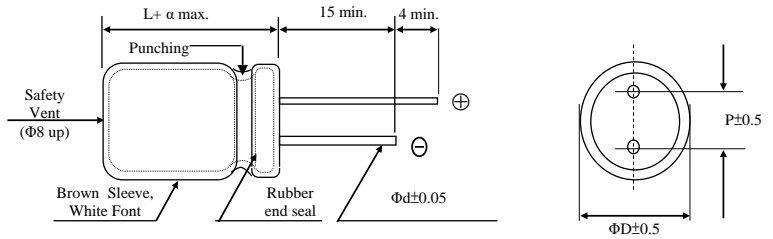


FOR APPROVAL

DIMENSIONS(mm)

ΦD	5	6.3	8	8
L	11	11	11	12
α	1.0	1.0	1.0	1.0
P	2.0	2.5	3.5	3.5
Φd	0.5	0.5	0.5	0.5



Customer: Ozdisan	Electrolytic Capacitors SD Series	Su'scon Code
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Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100K Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
	SD025M100D11PKKKS00A	10	±20	25	32	105	5*11	3	14	80	1.50	2000
	SD025M101E11PKKKS00A	100	±20	25	32	105	6.3*11	25	14	270	0.300	2000
	SD025M471F12PKKKS00A	470	±20	25	32	105	8*12	117	14	650	0.130	2000
	SD050M101F11PKKKS00A	100	±20	50	63	105	8*11	50	10	550	0.250	2000

REMARKS:

1. Leakage Current Test: 6.3V ~100V at 20°C for 2 minutes; 160V ~450V at 20°C for 5 minutes ;
2. Operating temperature: 6.3V~400V -40°C~ +105°C ;420~450V -25°C~ +105°C ;
3. Dissipation Factor Test: at 20°C, 120 Hz.
4. Capacitance Test: at 20°C, 120 Hz.
5. Ripple Current Test: at 105°C, 100K Hz ;
6. Load Life: 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.

Capacitance Change: Within±20% of initial value;
 tanδ: 200% or less of initial specified value;
 According to the specified value which stated in the catalogue to do the life testing;

Leakage Current: Initial specified value or less.

7. Shelf Life: The following specifications shall be satisfied when the capacitors are exposing them for 1000 hours 105°C without voltage applide. 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;
 tanδ: 200% or less of initial specified value;
 Leakage Current : Initial specified value or less.

8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION

Voltage Range 工作電壓範圍	6.3V~100V	160V~400V	450V								
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV(After 2 minutes application of DC working voltage,at 20°C) WV > 100V I ≤ 0.03CV+20 (uA)(After 5 minutes application of DC working voltage,at 20°C)										
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature:20°C										
	Rate Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	400~450
	tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.										
Standards 參照標準	JIS C-5101-4(IEC 60384)										

●RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current						
Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)				
		50	120	1k	10k	100k
6.3~100	0.47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~450	2.2~330	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

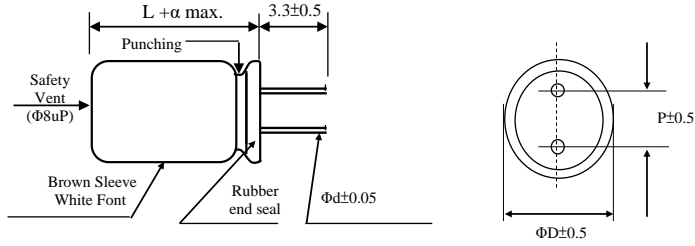
When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date:2023.04.17

FOR APPROVAL

DIMENSIONS(mm)

ΦD	8
L	12
α	1.0
P	3.5
Φd	0.5



Customer: Ozdisan	Electrolytic Capacitors SD Series	Su'scon Code
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Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100K Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
P/N	P/N											
	SD025M471F12PKKCC33A	470	±20	25	32	105	8*12	117	14	650	0.130	2000

REMARKS:

- Leakage Current Test:** 6.3V ~100V at 20°C for 2 minutes; 160V ~450V at 20°C for 5 minutes ;
- Operating temperature:** 6.3V~400V -40°C~ +105°C ;420~450V -25°C~ +105°C ;
- Dissipation Factor Test:** at 20°C, 120 Hz.
- Capacitance Test:** at 20°C, 120 Hz.
- Ripple Current Test:** at 105°C, 100K Hz ;
- Load Life:** 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.

Capacitance Change: Within±20% of initial value;
tanδ: 200% or less of initial specified value;
 According to the specified value which stated in the catalogue to do the life testing;

Leakage Current: Initial specified value or less.

7. Shelf Life: The following specifications shall be satisfied when the capacitors :
 exposing them for 1000 hours 105°C without voltage applide. 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;
tanδ: 200% or less of initial specified value;
Leakage Current : Initial specified value or less.

8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION

Voltage Range 工作電壓範圍	6.3V~100V	160V~400V	450V								
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV (After 2 minutes application of DC working voltage, at 20°C) WV > 100V I ≤ 0.03CV + 20 (uA) (After 5 minutes application of DC working voltage, at 20°C)										
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rate Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	400~450
	tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24
	When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.										
Standards 參照標準	JIS C-5101-4(IEC 60384)										

●RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current						
Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)				
		50	120	1k	10k	100k
6.3~100	0.47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~450	2.2~330	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

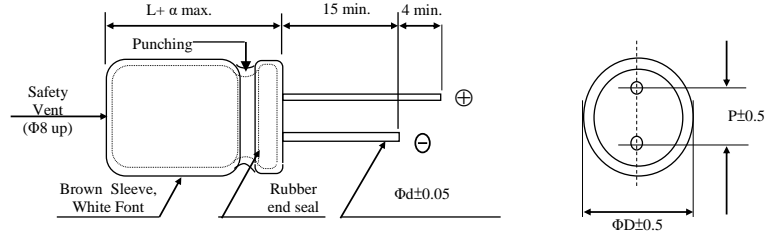
When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date: 2023.04.17

FOR APPROVAL

DIMENSIONS(mm)

ΦD	8
L	20
α	2.0
P	3.5
Φd	0.5



Customer: Ozdisan	Electrolytic Capacitors SD Series	Su'scon Code
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Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100K Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
P/N	P/N											
	SD035M471F20PKKKS00A	470	±20	35	44	105	8*20	164	12	1020	0.090	2000

REMARKS:

- Leakage Current Test:** 6.3V ~100V at 20°C for 2 minutes; 160V ~450V at 20°C for 5 minutes ;
- Operating temperature:** 6.3V~400V -40°C~ +105°C ;420~450V -25°C~ +105°C ;
- Dissipation Factor Test:** at 20°C, 120 Hz.
- Capactitance Test:** at 20°C, 120 Hz.
- Ripple Current Test:** at 105°C, 100K Hz ;
- Load Life:** 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.

Capacitance Change: Within±20% of initial value;
tanδ: 200% or less of initial specified value;
 According to the specified value which stated in the catalogue to do the life testing;

Leakage Current: Initial specified value or less.

7. Shelf Life: The following specifications shall be satisfied when the capacitors :
 exposing them for 1000 hours 105°C without voltage applide. 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;
tanδ: 200% or less of initial specified value;
Leakage Current : Initial specified value or less.

8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION

Voltage Range 工作電壓範圍	6.3V~100V	160V~400V	450V								
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV (After 2 minutes application of DC working voltage, at 20°C) WV > 100V I ≤ 0.03CV + 20 (uA) (After 5 minutes application of DC working voltage, at 20°C)										
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rate Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	400~450
	tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24
	When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.										
Standards 參照標準	JIS C-5101-4(IEC 60384)										

●RIPPLE CURRENT COEFFICIENTS

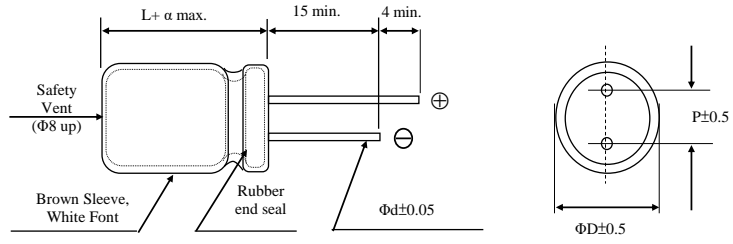
Frequency coefficient of allowable ripple current						
Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)				
		50	120	1k	10k	100k
6.3~100	0.47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~450	2.2~330	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

FOR APPROVAL

DIMENSIONS(mm)

ΦD	10	13
L	20	25
α	2.0	2.0
P	5.0	5.0
Φd	0.6	0.6



Customer: Ozdisan	Electrolytic Capacitors SD Series	Su'scon Code

Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100K Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
	SD025M102G20PKKKS00A	1000	±20	25	32	105	10*20	250	14	1410	0.058	2000
	SD035M222I25PKKKS00A	2200	±20	35	44	105	13*25	770	14	2250	0.050	2000
	SD050M471G20PKKKS00A	470	±20	50	63	105	10*20	235	10	1210	0.120	2000

REMARKS:

- Leakage Current Test:** 6.3V ~100V at 20°C for 2 minutes; 160V ~450V at 20°C for 5 minutes ;
- Operating temperature:** 6.3V~400V -40°C ~ +105°C ;420~450V -25°C ~ +105°C ;
- Dissipation Factor Test:** at 20°C, 120 Hz.
- Capacitance Test:** at 20°C, 120 Hz.
- Ripple Current Test:** at 105°C, 100K Hz ;
- Load Life:** 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.
- Capacitance Change:** Within±20% of initial value;
- tanδ:** 200% or less of initial specified value;
- Leakage Current:** Initial specified value or less.
- Shelf Life:** The following specifications shall be satisfied when the capacitors are exposing them for 1000 hours 105°C without voltage applide. 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;
- tanδ:** 200% or less of initial specified value;
- Leakage Current :** Initial specified value or less.
- 8. when have characteristic requested:** Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION

Voltage Range 工作電壓範圍	6.3V~100V	160V~400V	450V								
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV (After 2 minutes application of DC working voltage, at 20°C) WV > 100V I ≤ 0.03CV + 20 (uA) (After 5 minutes application of DC working voltage, at 20°C)										
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rate Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	400~450
	tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24
	When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.										
Standards 參照標準	JIS C-5101-4(IEC 60384)										

●RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current						
Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)				
		50	120	1k	10k	100k
6.3~100	0.47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~450	2.2~330	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

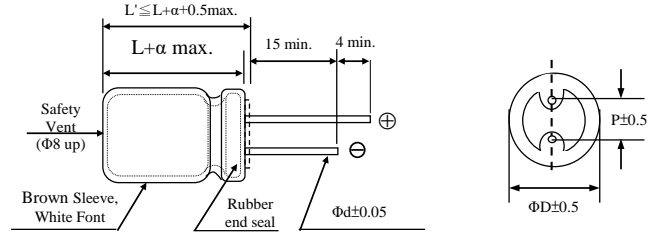
When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date: 2023.04.17

FOR APPROVAL

DIMENSIONS(mm)

ΦD	13	13	16	16	18
L	21	25	26	32	25
α	2.0	2.0	2.0	2.0	2.0
P	5.0	5.0	7.5	7.5	7.5
Φd	0.6	0.6	0.8	0.8	0.8



Customer: Ozdisan	Electrolytic Capacitors SD Series	Su'scon Code
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Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100K Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
	SD025M222I21TKKKS00A	2200	±20	25	32	105	13*21	550	16	2150	0.050	2000
	SD025M222I25TKKKS00A	2200	±20	25	32	105	13*25	550	16	2250	0.043	2000
	SD035M102I21TE99S00A	1000	±20	35	44	105	13*21	350	12	1750	0.055	2000
	SD100M221I21TE99S00A	220	±20	100	125	105	13*21	220	7	1080	0.053	2000
	SD200M101J26TKKKS00A	100	±20	200	250	105	16*26	620	20	1285	0.500	2000
	SD250M101J32TKKKS00A	100	±20	250	300	105	16*32	770	20	1405	0.620	2000
	SD400M220I25TKKKS00A	22	±20	400	450	105	13*25	284	24	350	1.95	2000
	SD400M470J26TKKKS00A	47	±20	400	450	105	16*26	584	24	720	1.10	2000
	SD400M680K25TKKKS00A	68	±20	400	450	105	18*25	836	24	820	1.10	2000

REMARKS:

1. Leakage Current Test: 6.3V ~100V at 20°C for 2 minutes; 160V ~450V at 20°C for 5 minutes ;

2. Operating temperature: 6.3V~400V -40°C ~ +105°C ;420~450V -25°C ~ +105°C ;

3. Dissipation Factor Test: at 20°C, 120 Hz.

4. Capacitance Test: at 20°C, 120 Hz.

5. Ripple Current Test: at 105°C, 100K Hz ;

6. Load Life: 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.

Capacitance Change: Within±20% of initial value;

tanδ: 200% or less of initial specified value;

Leakage Current: According to the specified value which stated in the catalogue to do the life testing;

7. Shelf Life: Initial specified value or less.

The following specifications shall be satisfied when the capacitors : exposing them for 1000 hours 105°C without voltage applide. 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;

tanδ: 200% or less of initial specified value;

Leakage Current : Initial specified value or less.

8. when have characteristic requested: Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION												
Voltage Range 工作電壓範圍	6.3V~100V				160V~400V				450V			
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV(After 2 minutes application of DC working voltage,at 20°C)											
	WV > 100V I ≤ 0.03CV+20 (uA)(After 5 minutes application of DC working voltage,at 20°C)											
Dissipation Factor 散逸因素 (損失角)	Measurement Frequency:120Hz. Temperature:20°C											
(tan δ)	Rate Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	400~450	
	tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24	
	When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.											
Standards 參照標準	JIS C-5101-4(IEC 60384)											

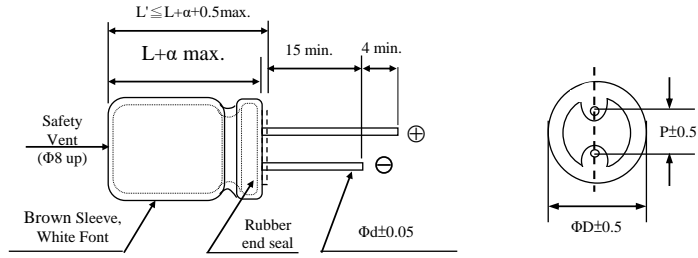
●RIPPLE CURRENT COEFFICIENTS						
Frequency coefficient of allowable ripple current						
Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)				
		50	120	1k	10k	100k
6.3~100	0.47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~450	2.2~330	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.
 Production date:2023.04.17

FOR APPROVAL

DIMENSIONS(mm)

ΦD	16	16	18
L	26	32	25
α	2.0	2.0	2.0
P	7.5	7.5	7.5
Φd	0.8	0.8	0.8



Customer: Ozdisan	Electrolytic Capacitors SD Series	Su'scon Code
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Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max (uA)	D.F. MAX (%)	R.C 100K Hz (mA rms)	IMP 100KHz at 25°C (Ω)Max	Load Life (hours)
	SD450M560J26TE99S00A	56	±20	450	500	105	16*26	776	24	680	2.42	2000
	SD500M330J32TE99S00A	33	±20	500	550	105	16*32	515	24	630	2.70	2000
	SD500M470K25TE99S00A	47	±20	500	550	105	18*25	725	24	580	4.50	2000

REMARKS:

- Leakage Current Test:** 6.3V ~100V at 20°C for 2 minutes; 160V ~500V at 20°C for 5 minutes ;
- Operating temperature:** 450V&500V -40°C~ +105°C ;
- Dissipation Factor Test:** at 20°C, 120 Hz.
- Capacitance Test:** at 20°C, 120 Hz.
- Ripple Current Test:** at 105°C, 100K Hz ;
- Load Life:** 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.
- Capacitance Change:** Within±20% of initial value;
- tanδ:** 200% or less of initial specified value;
- Leakage Current:** Initial specified value or less.
- Shelf Life:** The following specifications shall be satisfied when the capacitors : exposing them for 1000 hours 105°C without voltage applide. 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;
- tanδ:** 200% or less of initial specified value;
- Leakage Current :** Initial specified value or less.
- 8. when have characteristic requested:** Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION

Voltage Range 工作電壓範圍	6.3V~100V	160V~400V	450V~500V								
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV (After 2 minutes application of DC working voltage, at 20°C)										
	WV > 100V I ≤ 0.03CV + 20 (uA) (After 5 minutes application of DC working voltage, at 20°C)										
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rate Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	400~500
	tanδ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24
	When nominal capacitance over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.										
Standards 參照標準	JIS C-5101-4(IEC 60384)										

●RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current						
Rated Voltage(V)	Capacitance(uF)	Frequency(Hz)				
		50	120	1k	10k	100k
6.3~100	0.47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~500	2.2~330	0.55	0.65	0.80	0.90	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.