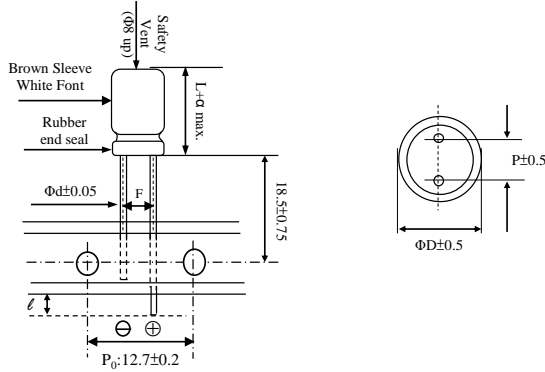


FOR APPROVAL

DIMENSIONS(mm)

| | |
|-----------------------------------|-----|
| ΦD | 10 |
| L | 16 |
| α | 2.0 |
| P | 5.0 |
| F ^{+0.8} _{-0.2} | 5.0 |
| ℓ | 1.0 |
| Φd | 0.6 |



| | | |
|-----------------------------|--|-------------------------------|
| Customer: Ozdisan | Electrolytic Capacitors MF Series | Su'scon Code |
|-----------------------------|--|-------------------------------|

| | | | | | | | | | | | | |
|----------------------------------|----------------------|-----------|---------------|-------------------|--------------------|------------------|---------------------------|--------------------------|--------------|---------------------|---------------------------|---------------|
| 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 100KHz (mA rms) | IMP 100KHz at 25°C (Ω)Max | Load Life (H) |
| P/N | P/N | | | | | | | | | | | |
| | MF035M471G16PKKKP50A | 470 | ±20 | 35 | 44 | 105 | 10*16 | 164 | 12 | 1210 | 0.060 | 5000 |

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 ; 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:** 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C. (ΦD ≤ 6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).

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;

- Shelf Life:** The following specifications shall be satisfied when the capacitors are restored to 20°C after 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: 150% or less of initial specified value;
Leakage Current: Initial specified value or less.

- 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 | 6.3~100V | 160~450V | | | | | | | | | | | |
| Leakage Current 洩漏電流 | WV ≤ 100V, I ≤ 0.01CV or 3uA (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 (損失角正切) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | | |
| (tan δ) | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400 | 450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 | 0.25 |
| | | 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 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 0.55 | 0.65 | 0.80 | 0.90 | 1.00 |

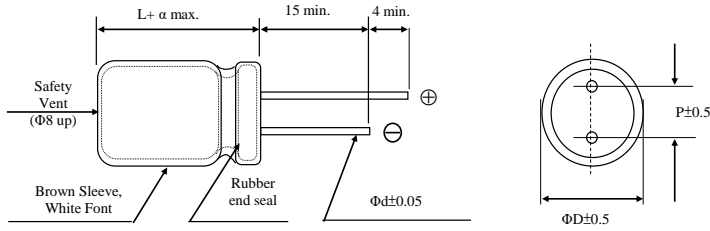
The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

DONG GUAN KUAN KUN ELECTRONIC CO., LTD
 YIN HE INDUSTRIAL ZONE, QING XI TOWN, TEL:+86-769- 7318000
 DONG GUAN CITY, GUAN DONG CHINA (P.R.O.C) FAX:+86-769- 7318008

FOR APPROVAL

DIMENSIONS(mm)

| | |
|----|-----|
| ΦD | 10 |
| L | 20 |
| α | 2.0 |
| P | 5.0 |
| Φd | 0.6 |



| | | | | | | | | | | | | | |
|------------------|---------|--|--|--|--|--|--|--|--|---------------------|--|--|--|
| Customer: | Ozdisan | Electrolytic Capacitors MF Series | | | | | | | | Su'scon Code | | | |
|------------------|---------|--|--|--|--|--|--|--|--|---------------------|--|--|--|

| | | | | | | | | | | | | |
|---------------------------|----------------------|-----------|---------------|-------------------|--------------------|------------------|---------------------------|--------------------------|--------------|---------------------|---------------------------|---------------|
| 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 100KHz (mA rms) | IMP 100KHz at 25°C (Ω)Max | Load Life (H) |
| P/N | P/N | | | | | | | | | | | |
| | MF050M331G20PKKKS00A | 330 | ±20 | 50 | 63 | 105 | 10*20 | 165 | 10 | 1380 | 0.061 | 5000 |

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 ; 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:** 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C. (ΦD≤6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).

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;

- Shelf Life:** The following specifications shall be satisfied when the capacitors are restored to 20°C after 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: 150% or less of initial specified value;
Leakage Current: Initial specified value or less.

- 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 | 6.3~100V | | | | | | | 160~450V | | | | | |
| Leakage Current 洩漏電流 | WV≤100V, I≤0.01CV or 3uA (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 (損失角正切) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | | |
| (tan δ) | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400 | 450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 | 0.25 |
| 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 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 0.55 | 0.65 | 0.80 | 0.90 | 1.00 |

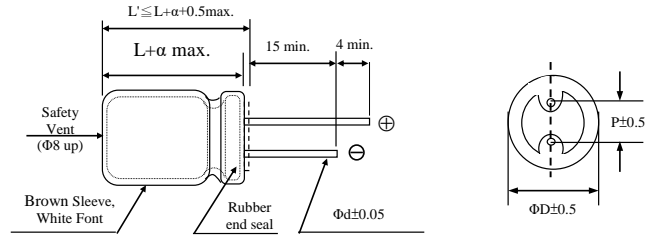
The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
 When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date:2023.04.17

FOR APPROVAL

DIMENSIONS(mm)

| | | | | | |
|----|-----|-----|-----|-----|-----|
| ΦD | 13 | 13 | 13 | 18 | 18 |
| L | 21 | 25 | 35 | 25 | 35 |
| α | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| P | 5.0 | 5.0 | 5.0 | 7.5 | 7.5 |
| Φd | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |



| | | | | | | | | | | | | |
|------------------|---------|--------------------------------|--|--|--|--|--|--|----------------|--|--|--|
| Customer: | Ozdisan | Electrolytic Capacitors | | | | | | | Su'scon | | | |
| | | MF Series | | | | | | | Code | | | |

| Electric Characteristics: | | | | | | | | | | | | |
|---------------------------|----------------------|------|------|--------|--------|-------|-----------|----------|------|----------|----------------|-------|
| Ozdisan | Su'scon | Cap. | Cap. | Rate | Surge | Oper. | Nominal | Leakage | D.F. | R.C | IMP | Load |
| P/N | P/N | (uF) | Tol. | Volt. | Volt. | Temp. | Case Size | Current | MAX | 100KHz | 100KHz | Life |
| | | | (%) | (V-DC) | (V-DC) | (°C) | D*L(mm) | Max (uA) | (%) | (mA rms) | at 25°C (Ω)Max | (H) |
| | MF050M561I25TKKKS00A | 560 | ±20 | 50 | 63 | 105 | 13*25 | 280 | 10 | 2124 | 0.034 | 5000 |
| | MF050M821I25TKKKS00A | 820 | ±20 | 50 | 63 | 105 | 13*25 | 410 | 10 | 2124 | 0.034 | 5000 |
| | MF050M182I35TKKKS00A | 1800 | ±20 | 50 | 63 | 105 | 13*35 | 900 | 10 | 3000 | 0.022 | 5000 |
| | MF063M471I21TKKKS00A | 470 | ±20 | 63 | 79 | 105 | 13*21 | 296 | 8 | 1440 | 0.085 | 5000 |
| | MF063M561I25TKKKS00A | 560 | ±20 | 63 | 79 | 105 | 13*25 | 352 | 8 | 1730 | 0.090 | 5000 |
| | MF100M471K25TKKKS00A | 470 | ±20 | 100 | 125 | 105 | 18*25 | 470 | 8 | 1480 | 0.130 | 5000 |
| | MF100M561K35TKKKS00A | 560 | ±20 | 100 | 125 | 105 | 18*35 | 560 | 8 | 2020 | 0.043 | 5000 |

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 ; 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:** 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C. (ΦD ≤ 6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).

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 restored to 20°C after 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: 150% 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 | 6.3~100V | | | | | | | 160~450V | | | | | |
| Leakage Current 洩漏電流 | WV ≤ 100V, I ≤ 0.01CV or 3uA (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 (損失角正切 (tan δ)) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | | |
| | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400 | 450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 | 0.25 |
| | 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) | | | | | | | | | | | | |

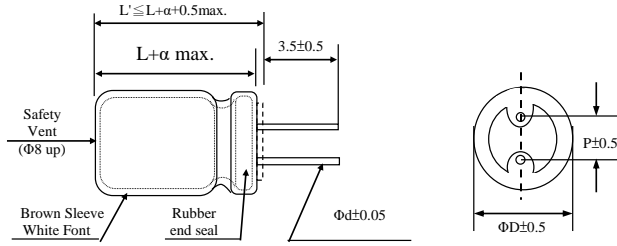
| ●RIPPLE CURRENT COEFFICIENTS | | | | | | |
|---|-----------------|---------------|------|------|------|------|
| Frequency coefficient of allowable ripple current | | | | | | |
| Rated Voltage(V) | Capacitance(uF) | Frequency(Hz) | | | | |
| | | 50 | 120 | 1k | 10k | 100k |
| 6.3~100 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 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 | 13 |
| L | 25 |
| α | 2.0 |
| P | 5.0 |
| Φd | 0.6 |



| | | | | | | | | | | | | |
|-----------------------------|----------------------|--|---------------------|-------------------------|--------------------------|------------------------|---------------------------------|--------------------------------|--------------------|---------------------------|---------------------------------|-----------------------|
| Customer: Ozdisan | | Electrolytic Capacitors MF Series | | | | | | | | Su'scon Code | | |
| 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 100KHz (mA rms) | IMP 100KHz at 25°C (Ω)Max | Load Life (H) |
| P/N | P/N | | | | | | | | | | | |
| | MF050M821I25TKKKC35A | 820 | ±20 | 50 | 63 | 105 | 13*25 | 410 | 10 | 2124 | 0.034 | 5000 |

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 ; 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:** 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C.
(ΦD≤6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).

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;

- Shelf Life:** The following specifications shall be satisfied when the capacitors are restored to 20°C after 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: 150% or less of initial specified value;
Leakage Current: Initial specified value or less.

- 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 | 6.3~100V | 160~450V | | | | | | | | | | | |
| Leakage Current 洩漏電流 | WV≤100V, I≤0.01CV or 3uA (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 (損失角正切) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | | |
| (tan δ) | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400 | 450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 | 0.25 |
| 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

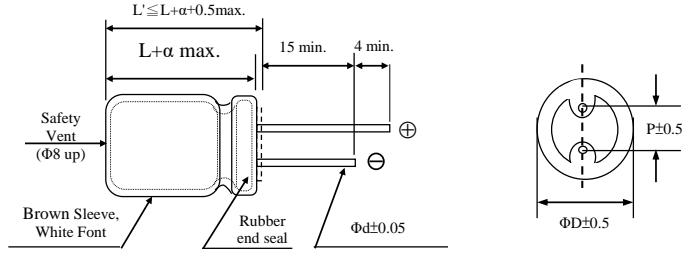
| | | | | | | |
|------------------|-----------------|---------------|------|------|------|------|
| Rated Voltage(V) | Capacitance(uF) | Frequency(Hz) | | | | |
| | | 50 | 120 | 1k | 10k | 100k |
| 6.3~100 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 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 | 16 | 18 |
| L | 25 | 25 |
| α | 2.0 | 2.0 |
| P | 7.5 | 7.5 |
| Φd | 0.8 | 0.8 |



| | | |
|-----------------------------|--|-------------------------------|
| Customer: Ozdisan | Electrolytic Capacitors MF Series | Su'scon Code |
|-----------------------------|--|-------------------------------|

| Electric Characteristics: | | | | | | | | | | | |
|---------------------------|----------------------|------|--------|--------|-------|---------|-----------|---------|----------|--------|------|
| Ozdisan | Su'scon | Cap. | Cap. | Rate | Surge | Oper. | Nominal | Leakage | D.F. | R.C | Load |
| P/N | P/N | (uF) | Tol. | Volt. | Volt. | Temp. | Case Size | Current | MAX | 100KHz | Life |
| | | (%) | (V-DC) | (V-DC) | (°C) | D*L(mm) | Max (uA) | (%) | (mA rms) | (H) | |
| | MF250M121K25TKKKS00A | 120 | ±20 | 250 | 300 | 105 | 18*25 | 920 | 15 | 1450 | 5000 |
| | MF350M820J25TKKKS00A | 82 | ±20 | 350 | 400 | 105 | 16*25 | 881 | 20 | 1070 | 5000 |

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 ; 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:** 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C. (ΦD ≤ 6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).

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 restored to 20°C after 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: 150% 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 | 6.3~100V | 160~450V | | | | | | | | | | |
| Leakage Current 洩漏電流 | WV ≤ 100V, I ≤ 0.01CV or 3uA (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 (損失角正切 (tan δ)) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | |
| | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400~450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 |
| | 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

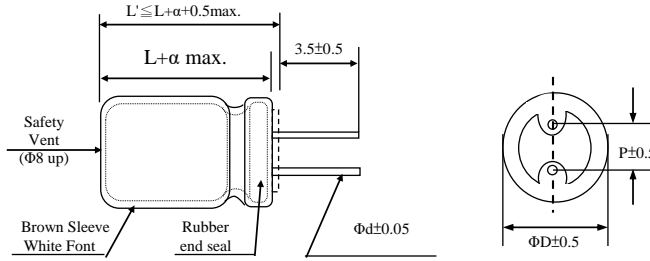
| Frequency coefficient of allowable ripple current | | | | | | |
|---|-----------------|---------------|------|------|------|------|
| Rated Voltage(V) | Capacitance(uF) | Frequency(Hz) | | | | |
| | | 50 | 120 | 1k | 10k | 100k |
| 6.3~100 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 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 | 16 |
| L | 25 |
| α | 2.0 |
| P | 7.5 |
| Φd | 0.8 |



| | | | | | | | | | | | |
|-----------------------------|----------------------|--|---------------------|-------------------------|--------------------------|------------------------|---------------------------------|--------------------------------|--------------------|---------------------------|-----------------------|
| Customer: Ozdisan | | Electrolytic Capacitors MF Series | | | | | | | | Su'scon Code | |
| 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 100KHz (mA rms) | Load Life (H) |
| P/N | P/N | | | | | | | | | | |
| | MF450M470J25TE99C35A | 47 | ±20 | 450 | 500 | 105 | 16*25 | 654 | 25 | 950 | 5000 |

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: **450V -40°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: **5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C.
(ΦD ≤ 6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).**
- Capacitance Change:** **Within±20% of initial value;**
tanδ: **200% or less of initial specified value;**
Leakage Current: **Initial specified value or less;**
7. Shelf Life: **The following specifications shall be satisfied when the capacitors are restored to 20°C after 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: **150% 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 | 6.3~100V | | | | | 160~450V | | | | | | |
| Leakage Current 洩漏電流 | WV ≤ 100V, I ≤ 0.01CV or 3uA (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 (損失角正切 (tan δ)) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | |
| | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400~450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 |
| 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

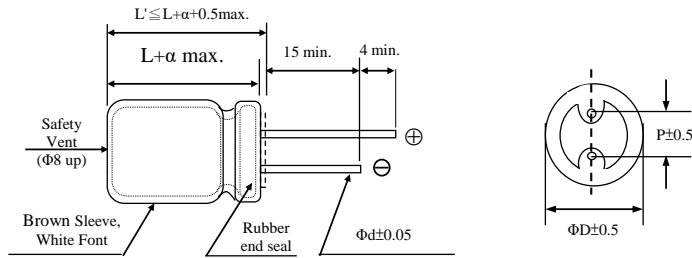
| | | | | | | |
|---|-----------------|---------------|------|------|------|------|
| Frequency coefficient of allowable ripple current | | | | | | |
| Rated Voltage(V) | Capacitance(uF) | Frequency(Hz) | | | | |
| | | 50 | 120 | 1k | 10k | 100k |
| 6.3~100 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 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 | 16 |
| L | 25 |
| α | 2.0 |
| P | 7.5 |
| Φd | 0.8 |



| | | |
|-----------------------------|--|-------------------------------|
| Customer: Ozdisan | Electrolytic Capacitors MF 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 100KHz (mA rms) | Load Life (H) |
|----------------|----------------------|--------------|---------------------|-------------------------|--------------------------|------------------------|---------------------------------|--------------------------------|--------------------|---------------------------|-----------------------|
| | MF450M470J25TE99S00A | 47 | ±20 | 450 | 500 | 105 | 16*25 | 654 | 25 | 950 | 5000 |

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: 450V -40°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: 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C.
(ΦD ≤ 6.3Φ, 2000hrs; ΦD=8mm, 3000hrs).
- Capacitance Change: Within ±20% of initial value;
- tanδ: 200% or less of initial specified value;
- Leakage Current: Initial specified value or less;
7. Shelf Life: The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C 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;
- tanδ: 150% 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 | 6.3~100V | | | | | 160~450V | | | | | | |
| Leakage Current 洩漏電流 | WV ≤ 100V, I ≤ 0.01CV or 3uA (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 (損失角正切 (tan δ)) | Measurement Frequency: 120Hz. Temperature: 20°C | | | | | | | | | | | |
| | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400~450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 |
| 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 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 0.55 | 0.65 | 0.80 | 0.90 | 1.00 |

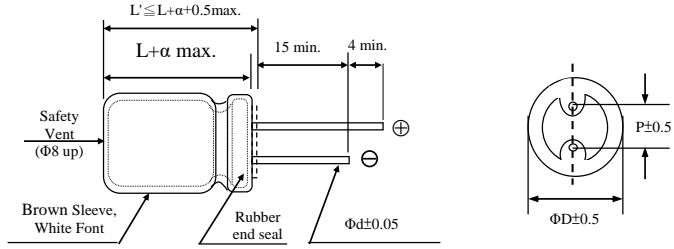
The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date: 2023.04.17

FOR APPROVAL

DIMENSIONS(mm)

| | |
|----|-----|
| ΦD | 13 |
| L | 25 |
| α | 2.0 |
| P | 5.0 |
| Φd | 0.6 |



| | | |
|-----------------------------|--|-------------------------------|
| Customer: Ozdisan | Electrolytic Capacitors MF Series | Su'scon Code |
|-----------------------------|--|-------------------------------|

| Electric Characteristics: | | | | | | | | | | | |
|----------------------------------|----------------------|------|------|-------|-------|-------|-----------|---------|------|--------|------|
| Ozdisan | Su'scon | Cap. | Cap. | Rate | Surge | Oper. | Nominal | Leakage | D.F. | R.C | Load |
| P/N | P/N | (uF) | Tol. | Volt. | Volt. | Temp. | Case Size | Current | MAX | 100KHz | Life |
| | MF050M821I25TKKKS00A | 820 | ±20 | 50 | 63 | 105 | 13*25 | 410 | 10 | 2124 | 5000 |
| | MF063M561I25TKKKS00A | 560 | ±20 | 63 | 79 | 105 | 13*25 | 352 | 8 | 1730 | 5000 |

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 ; 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: | 5000 hours, subjected to DC voltage with the rated ripple current is applied at 105°C. (ΦD ≤ 6.3Φ, 2000hrs; ΦD=8mm, 3000hrs). |
| 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 restored to 20°C after 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: | 150% 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 | 6.3~100V | 160~450V | | | | | | | | | | |
| Leakage Current 洩漏電流 | WV ≤ 100V, I ≤ 0.01CV or 3uA (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 (損失角正切 (tan δ)) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | | | | | | |
| | Rate Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 120~250 | 350 | 400~450 |
| | tanδ (MAX) | 0.20 | 0.17 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.08 | 0.15 | 0.20 | 0.25 |
| | 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 | 10~150 | 0.60 | 0.70 | 0.85 | 0.95 | 1.00 |
| | 220~1800 | 0.65 | 0.75 | 0.90 | 0.98 | 1.00 |
| | 2200~15000 | 0.75 | 0.80 | 1.00 | 1.00 | 1.00 |
| 160~450 | 1~330 | 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:2023.04.24