# KXF SERIES

## 105℃ 20mm Height, Snap-in Terminal Type


## ◆FEATURES

- Load Life : 105℃ 3000 hours, with 20mm height.
- RoHS compliance.

## ◆SPECIFICATIONS

| Items | Characteristics | |
|---|---|---|
| Category Temperature Range | −40～+105℃ | −25～+105℃ |
| Rated Voltage Range | 10～100Vdc | 160～450Vdc |
| Capacitance Tolerance | ±20%(20℃,120Hz) | |
| Leakage Current(MAX) | I=3 $\sqrt{CV}$ (After 5 minutes application of rated voltage)<br>I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc) | |
| (tanδ) Dissipation Factor(MAX) | (20℃,120Hz) | |
| Endurance | After applying rated voltage with rated ripple current for 3000 hours at 105℃, the capacitors shall meet the following requirements. | |
| Low Temperature Stability Impedance Ratio(MAX) | (120Hz) | |

Dissipation Factor(MAX):

| Rated Voltage (Vdc) | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160～450 |
|---|---|---|---|---|---|---|---|---|---|
| tanδ | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 | 0.20 |

Endurance:

| | |
|---|---|
| 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):

| Rated Voltage (Vdc) | 10～100 | 160～250 | 315～450 |
|---|---|---|---|
| Z(−25℃)/Z(20℃) | 3 | 3 | 8 |
| Z(−40℃)/Z(20℃) | 12 | − | − |

## ◆MULTIPLIER FOR RIPPLE CURRENT

| Frequency(Hz) | | 60(50) | 120(100) | 300 | 500 | 1k | 10k≦ |
|---|---|---|---|---|---|---|---|
| Coefficient | 10～100Vdc | 0.90 | 1.00 | 1.03 | 1.05 | 1.10 | 1.15 |
| | 160～250Vdc | 0.80 | 1.00 | 1.15 | 1.20 | 1.30 | 1.50 |
| | 315～450Vdc | 0.80 | 1.00 | 1.15 | 1.20 | 1.25 | 1.40 |

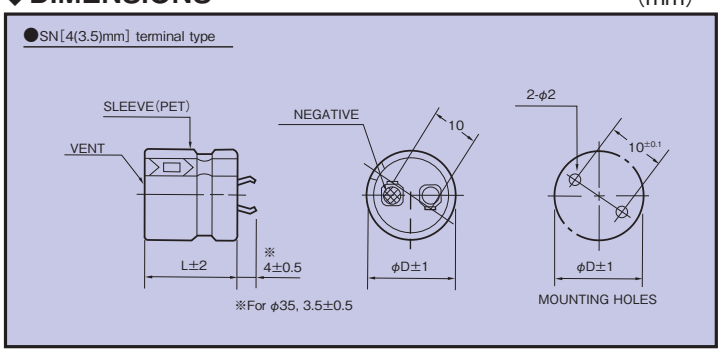
## ◆OPTION

| | Code |
|---|---|
| PET Sleeve without plate | EFC |

## ◆PART NUMBER

| □□□ | KXF | □□□□□ | M | □□□ | SN | D×L |
|---|---|---|---|---|---|---|
| Rated Voltage | Series | Capacitance | Capacitance Tolerance | Option | Terminal Code | Case Size |

## ◆DIMENSIONS (mm)



## ◆STANDARD SIZE

| Cap(μF) \ Vdc | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 |
|---|---|---|---|---|---|---|---|---|
| 330 | | | | | | | | 20×20 0.60 |
| 390 | | | | | | | | 20×20 0.71 |
| 470 | | | | | | | 20×20 0.65 | 22×20 0.78 |
| 560 | | | | | | | 20×20 0.70 | 25×20 0.95 |
| 680 | | | | | | 20×20 0.83 | 22×20 0.84 | 25×20 1.09 |
| 820 | | | | | | 22×20 0.99 | 25×20 1.04 | 30×20 1.32 |
| 1000 | | | | | 20×20 0.87 | 22×20 1.10 | 25×20 1.19 | |
| 1200 | | | | | 22×20 1.02 | 25×20 1.20 | 30×20 1.44 | |
| 1500 | | | | 20×20 0.80 | 25×20 1.15 | 30×20 1.47 | | |
| 1800 | | | | 22×20 0.94 | 25×20 1.34 | 30×20 1.52 | | |
| 2200 | | | 20×20 0.98 | 22×20 1.04 | 30×20 1.60 | | | |
| 2700 | | | 22×20 1.08 | 25×20 1.29 | | | | |
| 3300 | | 20×20 1.06 | 22×20 1.29 | 30×20 1.45 | | | | |
| 3900 | | 20×20 1.25 | 25×20 1.58 | | | | | |
| 4700 | 20×20 0.98 | 22×20 1.38 | 25×20 1.61 | | | | | |
| 5600 | 20×20 1.16 | 25×20 1.68 | | | | | | |
| 6800 | 22×20 1.31 | 25×20 1.80 | | | | | | |
| 8200 | 25×20 1.59 | | | | | | | |
| 10000 | 25×20 1.77 | | | | | | | |

| Cap(μF) \ Vdc | 160 | 180 | 200 | 220 | 250 | 315 | 350 | 385 |
|---|---|---|---|---|---|---|---|---|
| 39 | | | | | | | | 20×20 0.35 |
| 47 | | | | | | | 20×20 0.38 | 20×20 0.38 |
| 56 | | | | | | 20×20 0.41 | 20×20 0.40 | 22×20 0.42 |
| 68 | | | | | | 22×20 0.48 | 22×20 0.45 | 25×20 0.50 |
| 82 | | | | | | 22×20 0.51 | 25×20 0.54 | 25×20 0.52 |
| 100 | | | | | | 25×20 0.57 | 25×20 0.57 | 30×20 0.61 |
| 120 | | | | | 20×20 0.65 | 30×20 0.65 | 30×20 0.65 | 30×20 0.64 |
| 150 | | | | 20×20 0.70 | 22×20 0.74 | 30×20 0.70 | 35×20 0.78 | 35×20 0.80 |
| 180 | | 20×20 0.80 | 20×20 0.80 | 22×20 0.80 | 22×20 0.77 | 35×20 0.85 | 35×20 0.85 | |
| 220 | 20×20 0.81 | 22×20 0.90 | 22×20 0.87 | 25×20 0.85 | 25×20 0.95 | 35×20 0.90 | | |
| 270 | 22×20 0.98 | 22×20 0.95 | 25×20 0.95 | 25×20 1.02 | 30×20 1.00 | | | |
| 330 | 25×20 1.02 | 25×20 1.15 | 25×20 1.15 | 30×20 1.12 | 30×20 1.16 | | | |
| 390 | 25×20 1.25 | 25×20 1.20 | 30×20 1.20 | 30×20 1.25 | 35×20 1.25 | | | |
| 470 | 30×20 1.30 | 30×20 1.36 | 30×20 1.41 | 35×20 1.45 | | | | |
| 560 | 30×20 1.46 | 30×20 1.43 | 35×20 1.43 | | | | | |
| 680 | 35×20 1.51 | 35×20 1.51 | | | | | | |
| 820 | 35×20 1.55 | | | | | | | |

| Cap(μF) \ Vdc | 400 | 420 | 450 |
|---|---|---|---|
| 39 | | | 20×20 0.36 |
| 47 | 20×20 0.39 | 20×20 0.38 | 20×20 0.41 |
| 56 | 20×20 0.40 | 22×20 0.45 | 22×20 0.43 |
| 68 | 22×20 0.49 | 22×20 0.48 | 25×20 0.50 |
| 82 | 25×20 0.55 | 25×20 0.53 | 25×20 0.53 |
| 100 | 25×20 0.60 | 30×20 0.58 | 30×20 0.61 |
| 120 | 30×20 0.75 | 30×20 0.70 | 30×20 0.70 |
| 150 | 30×20 0.80 | 35×20 0.80 | 35×20 0.80 |
| 180 | 35×20 0.85 | | |

Ripple Current (A r.m.s./120Hz, 105℃)

Case Size φD×L(mm)