

Jamicon Series : TK

Teapo Series : SH

Standard Series

**550V
LINE
UP**



■ Endurance: 105°C 2000hours

■ Recommended Applications :For high quality , reliability application, high CV product

■ Corresponding product to RoHS

SPECIFICATIONS

| Item | Characteristics | | | | | | | | | | | |
|---|--|---------------------------------------|------|------|-----------------------|--------|---------|---------|-----------------------|---------|---------|---------|
| | -55~+105°C | | | | -40~+105°C | | | | -25~+105°C | | | |
| Category Temperature Range | -55~+105°C | | | | -40~+105°C | | | | -25~+105°C | | | |
| Rated Voltage Range | 6.3 ~ 100VDC | | | | 160 ~ 450VDC | | | | 500~550VDC | | | |
| Rated Capacitance Range | 1~ 22000 µF | | | | 1 ~ 470 µF | | | | 2.2~82 µF | | | |
| Capacitance Tolerance | ± 20 % (120Hz , 20°C) | | | | ± 20 % (120Hz , 20°C) | | | | ± 20 % (120Hz , 20°C) | | | |
| Leakage Current (20°C) | I=0.01CV or 3(µA)whichever is greater. | | | | I=0.03CV+10(µA) | | | | I=0.04CV+100(µA) | | | |
| (After rated voltage applied for 2 minutes)I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tan δ) (120Hz ,20°C) | WV | 6.3 | 10 | 16 | 25 | 35 | 50 | 63~80 | 100 | 160~250 | 350~450 | 500~550 |
| | tan δ | 0.24 | 0.20 | 0.17 | 0.15 | 0.12 | 0.10 | 0.10 | 0.08 | 0.15 | 0.20 | 0.25 |
| When nominal capacitance is over 1000 µF,tan δ shall be added 0.02 to the listed value with increase of every 1000 µF. | | | | | | | | | | | | |
| Low Temperature Stability Impedance Ratio (MAX) | Z(120Hz) | WV | | | | | | | | | | |
| | | 6.3 | 10 | 16 | 25 | 35~100 | 160~250 | 350~400 | 450 | 500~550 | | |
| | Z-25°C / Z+20°C | 4 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 6 | | |
| | Z-40°C / Z+20°C | 8 | 6 | 4 | 4 | 3 | 4 | 10 | — | — | | |
| Endurance | After applying rated voltage with rated ripple current for 2000hours at 105°C , the capacitors shall meet the following requirements. | | | | | | | | | | | |
| | Capacitance change | Within ± 20% of initial value | | | | | | | | | | |
| | D.F. (tan δ) | Not more than 200% of specified value | | | | | | | | | | |
| Shelf Life | After leaving capacitors under no load at 105°C for 1000 hours,the capacitors shall meet the same requirement as Endurance. | | | | | | | | | | | |

Dimensions [mm]



| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|------|------|-----|-----|
| φ D | 5 | 6.3 | 8 | 10 | 13 | 16 | 18 | 22 | 25 |
| p | 2.0 | 2.5 | 3.5 | 5.0 | 7.5 | 10.0 | 12.5 | | |
| φ d | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | | |
| a | 1.5 | 1.5 | 1.5 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |

Multiplier for Ripple Current

| | | | | |
|------------|------|------|------|------|
| Freq. (Hz) | 60 | 120 | 1K | ≥10K |
| 6.3~25V | 0.85 | 1.00 | 1.10 | 1.20 |
| 35 ~ 100V | 0.80 | 1.00 | 1.15 | 1.25 |
| 160 ~ 200V | 0.75 | 1.00 | 1.25 | 1.40 |
| 350 ~ 450V | 0.70 | 1.00 | 1.30 | 1.80 |
| 500~550V | 0.60 | 1.00 | 1.10 | 1.15 |

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■ STANDARD RATINGS

| Rated Voltage (SurageVoltage) (V) | Cap (μ F) | Case size Φ DxL(mm) | $\tan \delta$ | Ripple current (mA/rms105°C) (120Hz) | Rated Voltage (SurageVoltage) (V) | Cap (μ F) | Case size Φ DxL(mm) | $\tan \delta$ | Ripple current (mA/rms105°C) (120Hz) |
|---|-------------------|-----------------------------|---------------|--|---|-------------------|-----------------------------|---------------|--|
| 6.3 (8) | 100 | 5x11 | 0.24 | 110 | 25 (32) | 470 | 8x15 | 0.15 | 420 |
| | 150 | 5x11 | 0.24 | 130 | | | 10x12.5 | 0.15 | 440 |
| | 220 | 6.3x11 | 0.24 | 180 | | 680 | 10x15 | 0.15 | 560 |
| | 330 | 6.3x11 | 0.24 | 220 | | 1000 | 10x20 | 0.15 | 790 |
| | 470 | 6.3x11 | 0.24 | 270 | | 1500 | 13x20 | 0.15 | 1050 |
| | 680 | 8x11 | 0.24 | 375 | | 2200 | 13x25 | 0.17 | 1370 |
| | 1000 | 8x15 | 0.24 | 500 | | 3300 | 16x25 | 0.19 | 1500 |
| | | 10x12.5 | 0.24 | 520 | | 4700 | 16x32 | 0.21 | 1990 |
| | 1500 | 10x15 | 0.24 | 600 | | 6800 | 18x36 | 0.25 | 2480 |
| | 2200 | 10x20 | 0.26 | 850 | | 35 (44) | 10 | 5x11 | 0.12 |
| | 3300 | 13x20 | 0.28 | 1150 | 15 | | 5x11 | 0.12 | 60 |
| | 4700 | 13x20 | 0.30 | 1350 | 22 | | 5x11 | 0.12 | 70 |
| | 6800 | 13x25 | 0.34 | 1680 | 33 | | 5x11 | 0.12 | 90 |
| | 10000 | 16x32 | 0.42 | 2250 | 47 | | 5x11 | 0.12 | 110 |
| | 15000 | 16x36 | 0.52 | 2320 | 68 | | 6.3x11 | 0.12 | 140 |
| 22000 | 18x40 | 0.64 | 2810 | 100 | 6.3x11 | | 0.12 | 170 | |
| 10 (13) | 47 | 5x11 | 0.20 | 80 | 150 | | 8x11 | 0.12 | 235 |
| | 68 | 5x11 | 0.20 | 95 | 220 | | 10x12.5 | 0.12 | 330 |
| | 100 | 5x11 | 0.20 | 120 | 330 | | 10x12.5 | 0.12 | 410 |
| | 150 | 5x11 | 0.20 | 130 | 470 | | 10x15 | 0.12 | 530 |
| | 220 | 6.3x11 | 0.20 | 190 | 680 | | 10x20 | 0.12 | 720 |
| | 330 | 6.3x11 | 0.20 | 250 | 1000 | | 13x20 | 0.12 | 1020 |
| | | 8x11 | 0.20 | 275 | 1500 | | 13x25 | 0.12 | 1350 |
| | 470 | 6.3x11 | 0.20 | 290 | 2200 | | 16x25 | 0.14 | 1640 |
| | | 8x11 | 0.20 | 315 | 3300 | 16x36 | 0.16 | 2070 | |
| | 680 | 8x11 | 0.20 | 365 | 4700 | 18x36 | 0.18 | 2410 | |
| | | 10x12.5 | 0.20 | 420 | 50 (63) | 3.3 | 5x11 | 0.10 | 31 |
| | 1000 | 8x15 | 0.20 | 505 | | 4.7 | 5x11 | 0.10 | 36 |
| | | 10x12.5 | 0.20 | 560 | | 6.8 | 5x11 | 0.10 | 40 |
| | 1500 | 10x20 | 0.20 | 820 | | 10 | 5x11 | 0.10 | 55 |
| | 2200 | 10x20 | 0.22 | 970 | | 15 | 5x11 | 0.10 | 65 |
| 3300 | 13x20 | 0.24 | 1280 | 22 | | 5x11 | 0.10 | 80 | |
| 4700 | 13x25 | 0.26 | 1590 | 33 | | 5x11 | 0.10 | 95 | |
| 6800 | 16x25 | 0.30 | 1940 | 47 | | 6.3x11 | 0.10 | 130 | |
| 10000 | 16x36 | 0.38 | 2330 | 68 | | 8x11 | 0.10 | 180 | |
| 15000 | 18x36 | 0.48 | 2710 | 100 | | 8x11 | 0.10 | 220 | |
| 16 (20) | 33 | 5x11 | 0.17 | 75 | | 150 | 10x12.5 | 0.10 | 310 |
| | 47 | 5x11 | 0.17 | 90 | | 220 | 10x12.5 | 0.10 | 370 |
| | 68 | 5x11 | 0.17 | 105 | | | 10x15 | 0.10 | 415 |
| | 100 | 5x11 | 0.17 | 130 | | 330 | 10x20 | 0.10 | 535 |
| | 150 | 6.3x11 | 0.17 | 180 | | 470 | 10x20 | 0.10 | 660 |
| | 220 | 6.3x11 | 0.17 | 220 | 13x20 | | 0.10 | 760 | |
| | 330 | 8x11 | 0.17 | 310 | 680 | 13x20 | 0.10 | 850 | |
| | 470 | 8x11 | 0.17 | 375 | 1000 | 13x25 | 0.10 | 1210 | |
| | 680 | 8x15 | 0.17 | 465 | 1500 | 16x25 | 0.10 | 1500 | |
| | | 10x12.5 | 0.17 | 485 | 2200 | 16x32 | 0.12 | 1850 | |
| | 1000 | 10x15 | 0.17 | 650 | | 16x36 | 0.12 | 1950 | |
| | 1500 | 10x20 | 0.17 | 900 | 3300 | 18x36 | 0.14 | 2360 | |
| | 2200 | 13x20 | 0.19 | 1180 | 4700 | 18x45 | 0.16 | 2500 | |
| | 3300 | 13x25 | 0.21 | 1510 | 63 (79) | 10 | 5x11 | 0.10 | 55 |
| | 4700 | 16x25 | 0.23 | 1830 | | 15 | 5x11 | 0.10 | 65 |
| 6800 | 16x32 | 0.27 | 2120 | 22 | | 6.3x11 | 0.10 | 90 | |
| 10000 | 18x36 | 0.35 | 2590 | 33 | | 6.3x11 | 0.10 | 110 | |
| 22 | 5x11 | 0.15 | 65 | 47 | | 8x11 | 0.10 | 155 | |
| 33 | 5x11 | 0.15 | 80 | 68 | | 10x12.5 | 0.10 | 205 | |
| 47 | 5x11 | 0.15 | 95 | 100 | | 10x12.5 | 0.10 | 260 | |
| 68 | 6.3x11 | 0.15 | 125 | 150 | | 10x15 | 0.10 | 330 | |
| 100 | 6.3x11 | 0.15 | 160 | 220 | | 10x20 | 0.10 | 465 | |
| 150 | 8x11 | 0.15 | 220 | 330 | | 13x20 | 0.10 | 650 | |
| 220 | 8x11 | 0.15 | 270 | 470 | 13x20 | 0.10 | 750 | | |
| 25 (32) | 330 | 8x11 | 0.15 | 330 | 680 | 16x25 | 0.10 | 1000 | |
| | | 10x12.5 | 0.15 | 375 | 1000 | 16x32 | 0.10 | 1380 | |

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| Rated Voltage (SurageVoltage) (V) | Cap (μ F) | Case size Φ DxL(mm) | $\tan \delta$ | Ripple current (mA/rms105°C) (120Hz) | Rated Voltage (SurageVoltage) (V) | Cap (μ F) | Case size Φ DxL(mm) | $\tan \delta$ | Ripple current (mA/rms105°C) (120Hz) |
|---|-------------------|-----------------------------|---------------|--|---|-------------------|-----------------------------|---------------|--|
| 63 (79) | 1500 | 16x36 | 0.10 | 1650 | 350 (400) | 3.3 | 8x11 | 0.20 | 37 |
| | 2200 | 18x36 | 0.12 | 2080 | | 4.7 | 8x11 | 0.20 | 45 |
| 100 (125) | 10 | 6.3x11 | 0.08 | 65 | | 10 | 10x15 | 0.20 | 80 |
| | 15 | 6.3x11 | 0.08 | 75 | | 22 | 13x20 | 0.20 | 150 |
| | 22 | 8x11 | 0.08 | 115 | | 33 | 13x25 | 0.20 | 200 |
| | 33 | 8x11 | 0.08 | 140 | | 47 | 16x25 | 0.20 | 260 |
| | 47 | 10x12.5 | 0.08 | 190 | 100 | 18x32 | 0.20 | 410 | |
| | 68 | 10x15 | 0.08 | 240 | 400 (450) | 1 | 6.3x11 | 0.20 | 17 |
| | 100 | 10x20 | 0.08 | 340 | | 2.2 | 8x11 | 0.20 | 32 |
| | 150 | 13x20 | 0.08 | 480 | | 3.3 | 8x11 | 0.20 | 39 |
| | 220 | 13x25 | 0.08 | 630 | | 4.7 | 8x11 | 0.20 | 46 |
| | 330 | 16x25 | 0.08 | 830 | | | 10x12.5 | 0.20 | 55 |
| 470 | 16x32 | 0.08 | 1000 | 6.8 | | 8x15 | 0.20 | 60 | |
| 680 | 16x36 | 0.08 | 1200 | | | 10x12.5 | 0.20 | 65 | |
| 160 (200) | 1 | 5x11 | 0.15 | 17 | | 10 | 10x15 | 0.20 | 85 |
| | 2.2 | 6.3x11 | 0.15 | 26 | | 15 | 10x20 | 0.20 | 100 |
| | 3.3 | 6.3x11 | 0.15 | 36 | | 22 | 13x20 | 0.20 | 155 |
| | 4.7 | 6.3x11 | 0.15 | 43 | | 33 | 13x25 | 0.20 | 200 |
| | 6.8 | 8x11 | 0.15 | 54 | | 47 | 16x25 | 0.20 | 270 |
| | 10 | 8x11 | 0.15 | 70 | | 68 | 16x32 | 0.20 | 410 |
| | 15 | 10x12.5 | 0.15 | 90 | | | 18x25 | 0.20 | 390 |
| | 22 | 10x15 | 0.15 | 115 | | 100 | 18x32 | 0.20 | 500 |
| | 33 | 10x20 | 0.15 | 160 | 120 | 18x32 | 0.20 | 520 | |
| | 47 | 10x20 | 0.15 | 195 | | 18x36 | 0.20 | 550 | |
| | 68 | 13x20 | 0.15 | 260 | 150 | 18x40 | 0.20 | 620 | |
| | 100 | 13x25 | 0.15 | 350 | 420 (470) | 1 | 6.3x11 | 0.20 | 17 |
| | 150 | 16x25 | 0.15 | 435 | | 2.2 | 8x11 | 0.20 | 29 |
| | 220 | 16x32 | 0.15 | 560 | | 3.3 | 8x11 | 0.20 | 34 |
| 330 | 18x36 | 0.15 | 800 | 4.7 | | 10x12.5 | 0.20 | 55 | |
| 470 | 18x40 | 0.15 | 970 | 6.8 | | 10x15 | 0.20 | 68 | |
| 200 (250) | 1 | 6.3x11 | 0.15 | 19 | | 10 | 10x20 | 0.20 | 98 |
| | 2.2 | 6.3x11 | 0.15 | 28 | | 15 | 13x20 | 0.20 | 130 |
| | 3.3 | 6.3x11 | 0.15 | 36 | | 22 | 13x25 | 0.20 | 155 |
| | 4.7 | 8x11 | 0.15 | 50 | | 33 | 16x25 | 0.20 | 205 |
| | 6.8 | 8x11 | 0.15 | 60 | | 47 | 16x25 | 0.20 | 235 |
| | 10 | 10x12.5 | 0.15 | 80 | | 68 | 16x32 | 0.20 | 400 |
| | 15 | 10x15 | 0.15 | 110 | | | 18x25 | 0.20 | 380 |
| | 22 | 10x20 | 0.15 | 140 | | 100 | 18x36 | 0.20 | 490 |
| | 33 | 13x20 | 0.15 | 200 | | 120 | 18x40 | 0.20 | 530 |
| | 47 | 13x20 | 0.15 | 245 | 150 | 18x45 | 0.20 | 570 | |
| | 68 | 13x25 | 0.15 | 310 | 450 (500) | 1.0 | 6.3x11 | 0.20 | 18 |
| | 100 | 16x25 | 0.15 | 390 | | | 8x11 | 0.20 | 22 |
| | 150 | 16x32 | 0.15 | 480 | | 2.2 | 8x11 | 0.20 | 30 |
| | 220 | 16x36 | 0.15 | 675 | | | 10x12.5 | 0.20 | 37 |
| | | 18x32 | 0.15 | 685 | | 3.3 | 8x15 | 0.20 | 42 |
| 330 | 18x36 | 0.15 | 840 | 10x12.5 | | | 0.20 | 40 | |
| 250 (300) | 1 | 6.3x11 | 0.15 | 21 | | 4.7 | 10x12.5 | 0.20 | 52 |
| | 2.2 | 6.3x11 | 0.15 | 31 | | 6.8 | 10x15 | 0.20 | 62 |
| | 3.3 | 8x11 | 0.15 | 44 | | 10 | 10x20 | 0.20 | 85 |
| | 4.7 | 8x11 | 0.15 | 52 | | 15 | 13x20 | 0.20 | 120 |
| | 6.8 | 8x11 | 0.15 | 62 | 22 | 13x25 | 0.20 | 160 | |
| | 10 | 10x12.5 | 0.15 | 85 | 33 | 16x25 | 0.20 | 210 | |
| | 15 | 10x15 | 0.15 | 110 | 47 | 16x25 | 0.20 | 260 | |
| | 22 | 10x20 | 0.15 | 140 | 68 | 18x32 | 0.20 | 370 | |
| | 33 | 13x20 | 0.15 | 210 | 100 | 18x36 | 0.20 | 495 | |
| | 47 | 13x25 | 0.15 | 280 | 120 | 18x40 | 0.20 | 565 | |
| | 68 | 13x25 | 0.15 | 310 | 150 | 18x45 | 0.20 | 650 | |
| | 100 | 16x25 | 0.15 | 420 | 500 (550) | 2.2 | 8x11 | 0.25 | 25 |
| | 150 | 16x32 | 0.15 | 550 | | 3.3 | 8x16 | 0.25 | 30 |
| | 220 | 18x36 | 0.15 | 740 | | 4.7 | 8x16 | 0.25 | 34 |
| 350 (400) | 1 | 6.3x11 | 0.20 | 18 | | | 10x12.5 | 0.25 | 38 |
| | 2.2 | 8x11 | 0.20 | 31 | | 6.8 | 10x15 | 0.25 | 50 |

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| Rated Voltage (SurageVoltage) (V) | Cap (μF) | Case size Φ D \times L(mm) | tan δ | Ripple current (mA/rms105 $^{\circ}$ C) (120Hz) |
|---|--------------------|--------------------------------------|--------------|---|
| 500 (550) | 8.2 | 10x16 | 0.25 | 60 |
| | 10 | 10x20 | 0.25 | 70 |
| | | 13x16 | 0.25 | 80 |
| | 15 | 13x20 | 0.25 | 90 |
| | 18 | 13x20 | 0.25 | 100 |
| | 22 | 13x25 | 0.25 | 115 |
| | | 16x20 | 0.25 | 120 |
| | 33 | 18x25 | 0.25 | 180 |
| | 47 | 16x32 | 0.25 | 180 |
| | | 18x30 | 0.25 | 230 |
| | 68 | 18x32 | 0.25 | 250 |
| 82 | 18x40 | 0.25 | 335 | |
| 550 (600) | 4.7 | 10x12.5 | 0.25 | 35 |
| | 5.6 | 10x12.5 | 0.25 | 45 |
| | 6.8 | 10x15 | 0.25 | 55 |

| Rated Voltage (SurageVoltage) (V) | Cap (μF) | Case size Φ D \times L(mm) | tan δ | Ripple current (mA/rms105 $^{\circ}$ C) (120Hz) |
|---|--------------------|--------------------------------------|--------------|---|
| 550 (600) | 8.2 | 10x15 | 0.25 | 60 |
| | | 13x16 | 0.25 | 70 |
| | 10 | 10x20 | 0.25 | 75 |
| | | 13x16 | 0.25 | 80 |
| | 12 | 10x20 | 0.25 | 85 |
| | | 13x16 | 0.25 | 90 |
| | 15 | 13x20 | 0.25 | 95 |
| | 18 | 13x20 | 0.25 | 120 |
| | 22 | 13x25 | 0.25 | 140 |
| | 33 | 16x30 | 0.25 | 180 |
| | 47 | 16x32 | 0.25 | 250 |
| | | 18x30 | 0.25 | 260 |
| | 68 | 18x36 | 0.25 | 330 |
| | 82 | 18x40 | 0.25 | 380 |