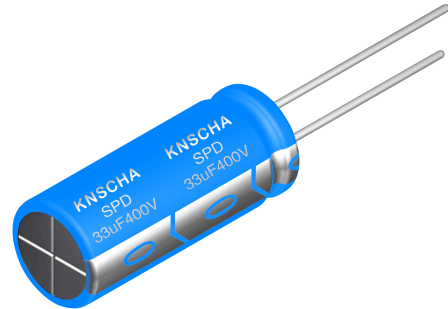


SPD Series (Ordinary materials)

FEATURES

- 105 ° C Miniaturized, Long Life, High Ripple Current and Low Impedance
- Load Life 1000~2000hours
- For DC GAN fast charger power and PD charger power
- Compliant to the RoHS directive

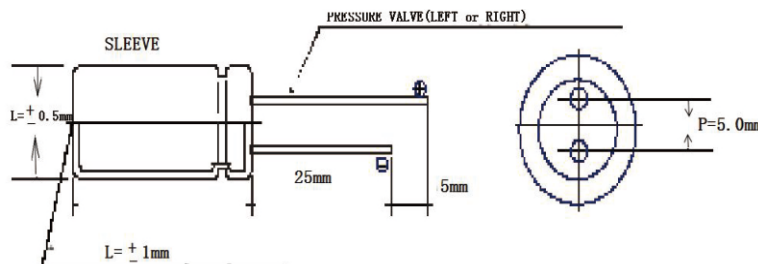
- 105℃小型化、高纹波和低阻抗品
- 寿命1000~2000小时
- 特别适合氮化镓快充和PD快充
- RoHS指令对策品



SPECIFICATIONS

| Item | Characteristics | | | | |
|---|---|-----|-----|-----|-----|
| Operating Temperature Range | -25 ~ +105 °C | | | | |
| Voltage Range | 250~450V.DC | | | | |
| Leakage Current | I = 0.01CV whichever is greater.(after 3 minutes) where, I: Max Leakage Current(μA), C: Nominal Capacitance(μF), V: Rated Voltage(V) (at 20 °C) | | | | |
| Dissipation Factor (tanδ) (at 120Hz, +20 °C) | Rated voltage(V.DC) | 250 | 350 | 400 | 450 |
| | tanδ(Max.) | 7 | 8 | 8 | 8 |
| Low Temp. Impedance Stability at 120Hz | Rated voltage(V.DC) | 250 | 350 | 400 | 450 |
| | Z(-25°C)/Z(+20°C) | 5 | 6 | 6 | 9 |
| | Z(-40°C)/Z(+20°C) | 6 | 7 | 9 | |
| Impedance(Ω) | See case size table | | | | |
| High Temp. Load Test | After ΦD ≤ Φ6.3: 1000hrs, ΦD ≥ Φ8: 2000hrs, application of DC rated working voltage at + 105 °C , The capacitor shall meet the following limits . Capacitance change ≤ ± 20% of the initial measured value Tanδ ≤ 200% of the initial specified value DC leakage current ≤ the initial specified value | | | | |
| High Temp. Non-Load Test | After storage for 1000 hours at 105°C with no voltage applied, voltage treatment of JIS-C-5102 article 4-4 is to be given and then measurement shall be made, The capacitor shall meet the following limits . Capacitance change ≤ ± 20% of the initial measured value tanδ ≤ 200% of the initial specified value DC leakage current ≤ 200% of the initial specified value | | | | |

◆ DRAWING



| | | | | | | | |
|----|--------|---------|---------|-----|-----|-----|-----|
| ΦD | 5 | 6.3/7.2 | 8/8.2/9 | 10 | 13 | 16 | 18 |
| P | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| Φd | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 |
| D | ±0.5mm | | | | | | |
| L | ±0.5mm | | | | | | |

▼ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Cap(μF) \ Freq.(HZ) | 60(50) | 120 | 1K | 10K | 100K |
|---------------------|--------|------|------|------|------|
| 3.3~100 | 0.40 | 0.50 | 0.80 | 0.90 | 1.00 |

PART NUMBERING SYSTEM

SPD Series (Ordinary materials)

STANDARD RATINGS

| WV(Vdc) Parameter Cap (μF) | 400V(480VF) | | | 400V(510VF) | | |
|----------------------------------|--------------|-------------------------------|-----------------------|--------------|-------------------------------|-----------------------|
| | ΦDxL (mm) | Impedance Ω 20°C,100KHZ | Ripple Current(mArms) | ΦDxL (mm) | Impedance Ω 20°C,100KHZ | Ripple Current(mArms) |
| | | | 105°C 100KHZ | | | 105°C 100KHZ |
| 4.7 | 6.3X9 | 4.20 | 116 | 6.3X11 | 4.20 | 116 |
| 6.8 | 6.3X11 | 3.50 | 128 | 6.3X12 | 3.50 | 128 |
| 8.2 | 6.3X12 | 2.80 | 170 | 6.3X13 | 2.80 | 170 |
| 10 | 6.3X14 | 2.20 | 185 | 6.3X15 | 2.20 | 185 |
| 10 | 8.2X9 | 2.20 | 185 | 8.2X11 | 2.20 | 185 |
| 12 | 6.3X15 | 2.00 | 220 | 6.3X18 | 2.20 | 220 |
| 12 | 8.2X10 | 2.00 | 220 | 8.2X13 | 2.20 | 220 |
| 12 | 7.2X13 | 2.00 | 220 | 7.2X15 | 2.20 | 220 |
| 15 | 6.3X18 | 1.50 | 240 | 6.3X20 | 1.50 | 240 |
| 15 | 7.2X15 | 1.50 | 240 | 7.2X16 | 1.50 | 240 |
| 15 | 8.2X11 | 1.50 | 240 | 8.0X13 | 1.50 | 240 |
| 18 | 6.3X16 | 2.00 | 265 | 6.3X21 | 2.00 | 265 |
| 18 | 7.2X15 | 2.00 | 265 | 7.2X17 | 2.00 | 265 |
| 18 | 8.2X13 | 2.00 | 265 | 8.2X14 | 2.00 | 265 |
| 22 | 6.3X20 | 1.00 | 305 | 7.2x20 | 1.00 | 305 |
| 22 | 7.2X18 | 1.00 | 305 | 8.0x16 | 1.00 | 305 |
| 22 | 8.2X15 | 1.00 | 305 | 9.0X14 | 1.00 | 305 |
| 25 | 7.2X24 | 0.60 | 350 | 8.2X17 | 0.60 | 350 |
| 27 | 8.2X17 | 0.60 | 350 | 8.0X18 | 0.60 | 350 |
| 27 | 10.2X13 | 0.60 | 350 | 10.2X14 | 0.60 | 350 |
| 33 | 7.2x26 | 0.50 | 370 | 8.0X20 | 0.50 | 370 |
| 33 | 8.2x19 | 0.50 | 370 | 9.0x23 | 0.50 | 370 |
| 33 | 10.2X14 | 0.50 | 370 | 10 X 15 | 0.50 | 370 |
| 39 | 8.2x25 | 0.50 | 435 | 8.0x28 | 0.50 | 435 |
| 39 | 9.0x18 | 0.50 | 435 | 9.0x25 | 0.50 | 435 |
| 39 | 10.2x17 | 0.50 | 435 | 10.0x18 | 0.50 | 435 |
| 47 | 8.2x25 | 0.50 | 610 | 8.0x30 | 0.50 | 610 |
| 47 | 9.0x23 | 0.50 | 610 | 9.0x25 | 0.50 | 610 |
| 47 | 10.2x19 | 0.50 | 610 | 10.0X20 | 0.50 | 610 |
| 47 | 13x16 | 0.50 | 610 | 13X18 | 0.50 | 610 |
| 56 | 9.0x30 | 0.48 | 815 | 9.0x32 | 0.48 | 815 |
| 56 | 10.2x23 | 0.48 | 815 | 10.0x25 | 0.48 | 815 |
| 56 | 13X18 | 0.48 | 815 | 13x20 | 0.48 | 815 |
| 68 | 13x21 | 0.45 | 1000 | 16x18 | 0.45 | 1000 |
| 82 | 16x18 | 0.40 | 1220 | 16x20 | 0.40 | 1220 |
| 100 | 16x22 | 0.35 | 1315 | 16x25 | 0.35 | 1315 |

SPD Series (ordinary materials)

STANDARD RATINGS

| Cap (μF) | Parameter VV(Vdc) | 420V(540VF) | | | 450V(560VF) | | |
|----------|----------------------|--------------|-------------------------------|--|--------------|-------------------------------|--|
| | | ΦDxL (mm) | Impedance Ω 20°C,100KHZ | Ripple Current(mArms) 105°C 100KHZ | ΦDxL (mm) | Impedance Ω 20°C,100KHZ | Ripple Current(mArms) 105°C 100KHZ |
| 4.7 | | 6.2x13 | 4.00 | 110 | 8.2x9 | 15.70 | 110 |
| 6.8 | | 8.2x9 | 3.20 | 125 | 8.2x12 | 12.80 | 125 |
| 8.2 | | 8.2x12 | 3.00 | 165 | 8.2x13 | 9.30 | 165 |
| 10 | | 8.2x13 | 2.80 | 185 | 8.2x13 | 8.20 | 185 |
| 15 | | 8 x 14 | 2.00 | 252 | 8.2x14 | 6.10 | 252 |
| 15 | | 10.2x12 | 2.00 | 252 | 10.2x14 | 6.10 | 252 |
| 18 | | 8.2x15 | 1.80 | 290 | 8.2x16 | 5.70 | 290 |
| 18 | | 10.2x13 | 1.80 | 290 | 10.2x15 | 5.70 | 290 |
| 22 | | 8.2x16 | 1.50 | 312 | 8.2x18 | 5.50 | 312 |
| 22 | | 10.2x14 | 1.50 | 312 | 10.2x16 | 5.50 | 312 |
| 27 | | 8.2x19 | 1.20 | 370 | 8.2x23 | 4.50 | 370 |
| 27 | | 10 x 15 | 1.20 | 370 | 10.2x18 | 4.50 | 370 |
| 33 | | 8 x 23 | 1.00 | 430 | 8.2x25 | 3.20 | 430 |
| 33 | | 10 x 16 | 1.00 | 430 | 13x20 | 3.20 | 430 |
| 39 | | 10.2x22 | 0.95 | 505 | 10.2x28 | 3.20 | 505 |
| 39 | | 13x18 | 0.95 | 505 | 13x22 | 3.20 | 505 |
| 47 | | 13x19 | 0.90 | 610 | 13x22 | 2.70 | 610 |
| 47 | | 10.0x23 | 0.90 | 610 | 16x18 | 2.70 | 610 |
| 56 | | 10.0x25 | 0.85 | 830 | 16x20 | 1.80 | 830 |
| 56 | | 13x21 | 0.85 | 830 | 16x20 | 1.80 | 830 |
| 68 | | 13x22 | 0.80 | 1000 | 16x25 | 1.60 | 1000 |
| 68 | | 16x20 | 0.80 | 1000 | 16x25 | 1.60 | 1000 |
| 82 | | 13x25 | 0.70 | 1160 | 18x25 | 1.40 | 1160 |
| 82 | | 16x22 | 0.70 | 1160 | 18x25 | 1.40 | 1160 |
| 100 | | 18x20 | 0.50 | 1315 | 18x25 | 1.10 | 1315 |
| 100 | | 16x25 | 0.50 | 1315 | 16x30 | 1.10 | 1315 |