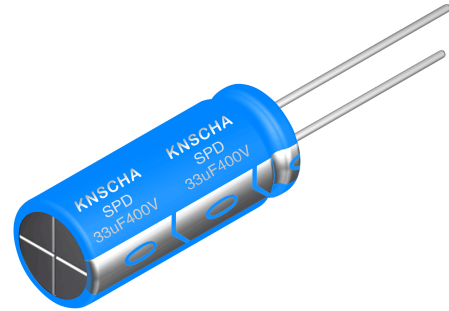


# SPD Series (Ordinary materials)

## 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

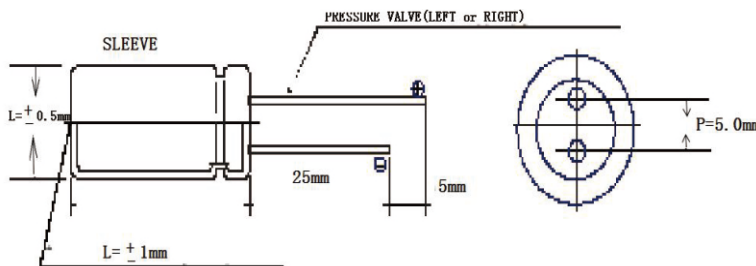
- 105℃小型化、高纹波和低阻抗品
- 寿命1000~2000小时
- 特别适合氮化镓快充和PD快充
- RoHS指令对策品



## 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

WV(Vdc) Parameter Cap (μF)	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