

KN series

- ◆ Load life 2000 Hrs at 105°C
- ◆ RoHS Compliant

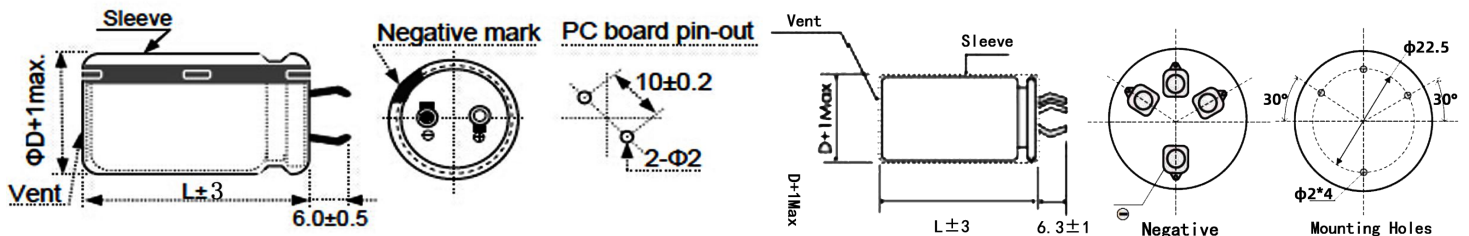


Specifications 規格表

Ltem 項目	Performance Characteristics 特性參數																										
Operating Temperature Range 工作溫度範圍	-40 to +105°C	-25 to +105°C																									
Rated Voltage Range 額定電壓範圍	16 to 100 VDC	160 to 450 VDC																									
Capacitance Range 容量範圍	68 to 56000 µF																										
Capacitance Tolerance 靜電容量偏差	±20% (120Hz, +20°C)																										
Leakage Current 漏電流	After 5 minutes at 20° C application of rated voltage, leakage current is not more than 0.01CV or 1.5mA, whichever is smaller C: Nominal Capacitance(µF) V: Rated Voltage(V)																										
Dissipation Factor 損耗角正切值 tan δ (%)	<table border="1"> <tr> <td>rated voltage (V)</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160-400</td> <td>450</td> </tr> <tr> <td>tan δ (Max)</td> <td>50</td> <td>40</td> <td>40</td> <td>30</td> <td>20</td> <td>20</td> <td>15</td> <td>20</td> </tr> </table>									rated voltage (V)	16	25	35	50	63	100	160-400	450	tan δ (Max)	50	40	40	30	20	20	15	20
	rated voltage (V)	16	25	35	50	63	100	160-400	450																		
tan δ (Max)	50	40	40	30	20	20	15	20																			
Low Temperature Characteristics 低溫特性	impedance ratio max 電容器最大阻抗比值																										
	rated voltage (V)	16	25	35	50	63	100	160-400	450																		
	Z(-25°C)/Z(+20°C)	4	4	4	4	4	4	4	8																		
Load Life 使用壽命	105°C施加額定工作電壓2000小時，經恢復後，產品性能應滿足以下要求 The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2000H at 105°C																										
	Capacitance change	≅ ±20% of the initial value																									
	D. F. (tan δ)	≅ 200% of the specified value																									
	Leakage current	≅ The specified value																									
Shelf Life 存儲特性	105°C放置1000小時，經恢復後20°C后，產品性能應滿足以下要求 The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C without voltage applied.																										
	Capacitance change	≅ ±20% of the initial value																									
	D. F. (tan δ)	≅ 150% of the specified value																									
	Leakage current	≅ The specified value																									

Diagram of Dimensions 外形尺寸圖 (mm)

●Standard Terminal Type : S (Φ22 ~ Φ35)



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Frequency Coefficient

Frequency Voltage (v)	50/60 Hz	120 Hz	300 Hz	1K Hz	10K Hz	≥50K Hz
≤100V	0.95	1.00	1.07	1.13	1.19	1.20
160-250V	0.87	1.00	1.17	1.32	1.45	1.50
≥350	0.80	1.00	1.16	1.30	1.41	1.43

Standard Ratings

Rated Voltage V	Rated Capacity μF	Size φD*L mm	Rated ripple current A
16V	3300	22*26	1.17
	4700	22*26	1.53
		25*26	1.55
	6800	22*31	2.02
		25*26	2.02
	8200	30*26	2.02
		22*31	2.20
	10000	22*31	2.79
		25*26	2.79
		30*26	2.81
	12000	22*36	3.06
		30*26	3.06
	15000	22*41	3.24
		25*36	3.24
		30*26	3.24
		35*32	3.24
	18000	22*51	3.54
		25*46	3.51
		30*36	3.51
		35*32	3.54
	22000	25*51	4.25
		30*36	4.08
		35*32	4.08
	27000	25*51	4.30
		30*41	4.30
	33000	35*32	4.30
		30*46	4.83
	39000	35*37	4.83
30*51		5.78	
47000	35*42	5.78	
	35*45	6.32	
56000	35*47	6.48	

Rated Voltage V	Rated Capacity μF	Size φD*L mm	Rated ripple current A
25V	3300	22*26	1.48
		25*26	1.48
	4700	22*26	1.88
		25*26	1.90
	6800	22*31	2.60
		25*26	2.60
		30*26	2.60
	8200	22*36	3.14
		25*31	3.14
		30*26	3.14
	10000	22*41	3.50
		25*36	3.50
		30*31	3.50
		35*27	3.50
	12000	22*46	4.02
		25*41	4.02
		30*31	4.02
		35*27	4.02
	15000	25*46	4.58
		30*36	4.58
		35*32	4.58
	18000	25*51	4.82
		30*41	4.82
		35*32	4.79
	22000	30*46	5.12
		35*37	5.12
	27000	35*42	5.30
	33000	35*52	6.09
39000	35*52	6.20	
47000	35*52	6.30	

Rated ripple current (A,rms) at 105°C, 120Hz

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Standard Ratings

Rated Voltage	Rated Capacity	Size ϕ D*L	Rated ripple current
V	μ F	mm	A
35V	1500	22*26	1.26
	2200	22*26	1.35
		25*26	1.45
	2700	22*26	1.55
		25*26	1.65
	3300	22*26	1.80
		25*26	1.90
	4700	22*36	2.42
		25*26	2.30
		30*26	2.54
	6800	22*41	3.24
		25*36	3.24
		30*26	3.21
		35*27	3.24
	10000	25*46	3.96
		30*36	3.96
		35*27	3.75
	12000	25*51	4.21
		30*41	4.21
		35*32	4.21
15000	30*46	4.69	
	35*37	4.69	
22000	35*52	5.50	
27000	35*52	5.80	
	35*45	5.60	
33000	35*52	5.90	

Rated ripple current (A,rms) at 105°C, 120Hz

Rated Voltage	Rated Capacity	Size ϕ D*L	Rated ripple current
V	μ F	mm	A
50V	1500	22*26	1.10
		25*26	1.02
	2200	22*31	1.65
		25*26	1.65
	2700	22*31	1.85
		25*26	1.85
		30*26	1.95
	3300	22*36	2.24
		25*31	2.24
		30*26	2.24
	4700	22*46	2.95
		25*36	2.80
		30*31	2.95
		35*27	2.95
	6800	25*46	3.23
		30*41	3.20
		35*32	3.26
	8200	30*46	3.58
		35*37	3.58
	10000	30*51	4.11
		30*45	4.01
		35*42	4.11
		30*40	4.00
		25*50	3.90
		35*30	3.86
	15000	35*52	5.05
	18000	35*52	5.30
	22000	35*60	5.50

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Standard Ratings

Rated Voltage	Rated Capacity	Size ϕ D*L	Rated ripple current
V	μ F	mm	A
63V	820	22*26	0.75
	1000	22*26	0.85
		25*26	0.85
	1500	22*26	1.10
		25*26	1.12
		30*26	1.14
	1800	22*31	1.40
		25*26	1.40
	2200	22*36	1.65
		25*31	1.65
		30*26	1.65
	2700	22*41	2.07
		25*36	2.07
		30*26	2.07
	3300	22*46	2.46
		25*36	2.40
		30*31	2.48
		35*27	2.48
	3900	25*41	2.92
		30*36	3.05
		35*27	3.05
	4700	25*51	3.43
		30*41	3.43
		35*32	3.43
	5600	30*46	3.86
		35*37	3.86
	6800	30*51	4.64
35*42		4.64	
8200	35*47	5.05	
10000	35*52	5.75	
	30*60	5.65	
	30*50	5.35	
15000	35*52	5.40	
	35*60	5.56	

Rated ripple current (A,rms) at 105°C, 120Hz

Rated Voltage	Rated Capacity	Size ϕ D*L	Rated ripple current
V	μ F	mm	A
100V	330	22*26	0.54
	470	22*26	0.79
		25*26	0.81
	560	22*26	0.90
		25*26	0.95
	680	22*31	1.02
		25*26	1.02
		30*26	1.14
	820	22*31	1.26
		25*26	1.26
		30*26	1.32
	1000	22*36	1.38
		25*31	1.38
		30*26	1.38
	1200	22*41	1.65
		25*36	1.65
		30*31	1.65
	1500	22*46	1.83
		25*41	1.83
		30*31	1.83
		35*27	1.83
	1800	25*41	2.52
		30*36	2.52
		35*32	2.52
	2200	25*51	3.03
		30*41	3.03
		35*32	3.03
	2700	30*46	4.10
		35*37	4.10
	3300	30*56	4.59
		35*47	4.59
	3900	35*47	4.98
	4700	35*52	5.03
35*40		4.80	
30*50		4.65	
5600	35*60	5.10	
5600	35*52	5.09	
6800	35*60	5.20	

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Standard Ratings

Rated Voltage	Rated Capacity	Size ΦD*L	Rated ripple current
V	μF	mm	A
160V	220	22*26	0.42
		22*31	0.98
	330	25*26	0.98
		30*26	1.00
	470	22*36	1.21
		25*31	1.21
		30*26	1.21
		22*31	1.15
	560	22*41	1.40
		25*36	1.40
		30*31	1.40
		35*27	1.40
	680	22*46	1.64
		25*36	1.58
		30*31	1.65
		35*27	1.71
	820	22*36	1.49
		25*41	1.76
		30*36	1.85
	1000	35*32	1.85
		25*51	2.15
		30*41	2.15
	1200	35*32	2.15
		25*56	2.46
		30*46	2.46
	1500	35*37	2.46
		30*51	2.80
1800	35*42	2.80	
	30*51	3.13	
2200	35*42	3.13	
	35*52	3.26	
3300	35*42	3.18	
	35*52	3.50	
200V	150	35*45	3.35
		22*26	0.54
	220	25*26	0.54
		22*31	0.92
	270	25*26	0.92
		30*26	0.92
270	22*31	1.03	
270	25*26	1.03	
270	30*26	1.05	

Rated Voltage	Rated Capacity	Size ΦD*L	Rated ripple current
V	μF	mm	A
200V	330	22*36	1.21
		25*31	1.21
		30*26	1.21
	390	22*36	1.33
		25*31	1.34
		30*31	1.45
	470	22*41	1.57
		25*36	1.59
		30*31	1.65
		35*27	1.65
	560	22*30	1.55
		22*46	1.81
		25*41	1.85
		30*31	1.85
	680	35*27	1.85
		22*51	2.04
		25*46	2.07
	820	30*31	2.04
		35*32	2.17
		25*51	2.30
	1000	30*36	2.30
		35*37	2.31
		30*41	2.62
	1200	35*37	2.62
		22*40	2.40
		25*40	2.51
		35*30	2.50
		25*50	2.50
	1500	30*30	2.45
		30*51	3.00
		35*42	3.00
	1800	35*47	3.28
		35*52	4.01
2200	35*52	4.10	
	30*50	3.85	
2700	35*52	4.10	
	35*45	3.80	
250V	100	22*31	0.44
		25*26	0.44
	120	22*25	0.42
		22*31	0.50
	150	25*26	0.50
		22*31	0.60
150	25*26	0.60	
150	30*26	0.60	

Rated ripple current (A,rms) at 105°C, 120Hz

KN series

Standard Ratings

Rated Voltage	Rated Capacity	Size ϕ D*L	Rated ripple current	
V	μ F	mm	A	
250V	220	22*36	1.00	
		25*31	1.00	
		30*26	1.00	
		22*30	0.95	
	270	270	22*41	1.16
			25*36	1.16
			30*31	1.16
	330	330	22*46	1.28
			25*36	1.28
			30*31	1.28
			35*27	1.28
	390	390	22*46	1.48
			30*31	1.48
			35*27	1.48
	470	470	25*41	1.76
			30*36	1.76
			35*32	1.76
			25*30	1.56
			25*35	1.60
			22*36	1.56
			30*30	1.68
	22*40	1.68		
	560	560	25*51	1.93
			30*41	1.93
			35*32	1.93
	680	680	25*40	2.15
			30*46	2.22
			35*37	2.22
			30*51	2.48
			22*45	2.15
	820	820	25*45	2.46
			30*35	2.43
30*51			2.48	
35*42			2.48	
1000	1000	25*50	2.74	
		30*40	2.65	
		35*47	2.80	
1200	1200	35*50	3.00	
		35*55	3.00	
1500	1500	35*50	3.50	
		35*55	3.50	
2200	2200	35*55	5.00	
		35*70	5.10	

Rated Voltage	Rated Capacity	Size ϕ D*L	Rated ripple current	
V	μ F	mm	A	
400V	100	22*36	0.82	
		25*31	0.82	
		30*26	0.82	
		22*25	0.70	
		25*25	0.80	
	120	120	22*36	0.90
			25*31	0.90
			30*26	0.90
			22*25	0.80
	150	150	25*25	0.85
			22*41	0.98
			25*36	0.98
			30*31	0.95
			35*27	0.95
	180	180	22*30	0.90
			25*25	0.90
			25*36	1.05
			30*30	1.21
	220	220	30*41	1.21
			25*40	1.21
			25*35	1.21
			35*32	1.21
			22*40	1.10
			25*30	1.10
			30*25	1.10
	270	270	30*46	1.40
			35*37	1.40
			25*35	1.30
			30*30	1.30
	330	330	30*51	1.57
			35*42	1.57
			22*45	1.50
			25*40	1.50
	390	390	30*35	1.50
			30*40	1.68
			35*42	1.71
	470	470	35*45	1.94
			25*50	1.80
			30*40	1.80
			35*35	1.80
			30*50	1.85
			30*45	1.85
35*40			1.85	
35*50	1.98			

Rated ripple current (A,rms) at 105°C, 120Hz

KN series

Standard Ratings

Rated Voltage	Rated Capacity	Size φD*L	Rated ripple current	
V	μF	mm	A	
400V	560	35*52	2.23	
		30*45	2.23	
		35*45	2.40	
		35*40	2.40	
	680	680	35*62	2.85
			35*50	2.83
			35*45	2.80
			30*50	2.70
			35*40	2.65
	820	820	35*62	2.90
			35*45	2.83
			35*50	2.85
	1000	1000	35*70	3.20
			35*65	3.15
			35*60	3.15
	1200	1200	35*50	3.10
			35*70	3.30
			35*65	3.30
	450V	82	22*36	0.64
			25*31	0.64
30*26			0.64	
100		100	22*41	0.74
			25*31	0.74
			30*31	0.74
			22*25	0.70
			22*35	0.72
			25*25	0.72
120		120	22*46	0.82
			25*36	0.82
			30*31	0.82
			22*30	0.8
			25*25	0.8
			25*30	0.80
			30*25	0.80
150		150	22*51	0.96
			25*41	0.96
			30*36	0.96
			35*27	0.96
	22*30		0.90	

Rated Voltage	Rated Capacity	Size φD*L	Rated ripple current	
V	μF	mm	A	
450V	150	22*35	0.90	
		25*30	0.90	
		25*35	0.95	
		30*25	0.95	
		30*30	0.95	
		25*46	1.14	
	180	180	30*36	1.10
			35*32	1.14
			30*41	1.24
	220	220	35*37	1.24
			22*40	1.20
			25*40	1.20
			25*50	1.20
			30*30	1.20
			30*51	1.48
	270	270	35*42	1.48
			30*40	1.60
	330	330	30*50	1.64
			25*50	1.60
			30*35	1.60
			35*30	1.60
			35*40	1.80
	390	390	35*52	1.86
			35*52	1.90
	470	470	35*45	1.90
			30*50	1.90
			30*60	1.90
	560	560	35*50	2.40
			35*45	2.40
			35*40	2.40
			30*50	2.40
	680	680	35*60	2.90
			35*50	2.85
			35*45	2.80
			30*55	2.80
	820	820	35*70	3.20
			35*65	3.20
			35*60	3.20
	1000	1000	35*70	3.30
			35*65	3.30
1200	1200	35*80	3.60	

Rated ripple current (A,rms) at 105°C, 120Hz