



SURGE
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CAE-KX Series

Surface Mount Type, Low impedance



This series has 10 to 20% less impedance with same package than CAE-AX series.
High capacitance with small package.
Solvent proof (within 2 minutes).

CAE-KX ← ultra low Z → CAE-AX

**RoHS
Compliant**

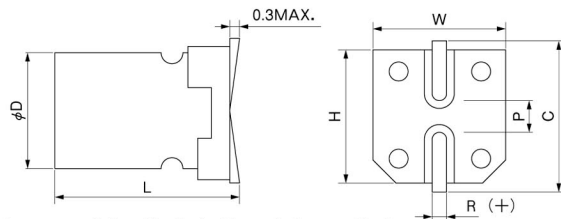
*See Part Number System for Details

Specifications

Items		Specifications								
Rated voltage (V)		6.3	10	16	25	35	50	63	80	100
Category temperature range (°C)		-55 to +105								
Capacitance tolerance (%)		±20 (120Hz/20°C)								
Tangent of loss angle (tan δ) (MAX.) (120Hz/20°C)	φ4 to φ6.3	0.24	0.20	0.16	0.14	0.12	0.12	0.10	0.08	0.07
	φ8 to φ16	0.28	0.24	0.20	0.16	0.14	0.14	0.12	0.10	0.08
When nominal capacitance exceeds 1000 μF, add 0.02 to the value above for each 1000 μF increase.										
Leakage current (L.C.) (μA/after 2 min.) (MAX.)		The greater value of either 0.01CV or 3								
Impedance (120Hz) ratio at low temperature (MAX.)	Z-40°C/Z20°C	3	2	2	2	2	2	2	2	2
	Z-55°C/Z20°C	5	4	4	3	3	3	3	3	3
Endurance 105°C rated voltage applied	Test Time	2000 hrs. (φD≤6.3 : 1000hrs.)								
	ΔC/C	Within ±25% of the initial value								
	tan δ	≤ Twice the initial standard								
	L.C.	≤ The initial standard								

Dimensions

(Unit : mm)



A pressure relief vent is attached to products over φD=8

D ±0.5MAX.	L ±0.3	W ±0.2	H ±0.2	C ±0.2	R	P ±0.2
4	6.0	4.3	4.3	5.0	0.5 to 0.8	1.0
5	6.0	5.3	5.3	6.0	0.5 to 0.8	1.4
6.3	6.0	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	7.7	6.6	6.6	7.3	0.5 to 0.8	2.2
8	10.2	8.3	8.3	9.0	0.7 to 1.0	3.2
10	7.7	10.3	10.3	11.0	1.1 to 1.4	4.6
10	10.2	10.3	10.3	11.0	1.1 to 1.4	4.6
12.5	13.5 ±0.5	12.8	12.8	13.5	1.1 to 1.4	4.6
16	16.5 ±0.5	16.3	16.3	17.0	1.8 to 2.1	7.0

Size List, Impedance, Maximum Permissible Ripple Current

μF \ V	6.3	10	16	25	35	50	63	80	100
4.7									
10				4X6.0 1.45 90	4X6.0 1.45 90	4X6.0 2.55 64	5X6.0 2.00 55	6.3X6.0 2.40 45	
15			4X6.0 1.45 90	5X6.0 0.70 170	5X6.0 0.70 170	6.3X6.0 0.52 215	6.3X6.0 1.00 90	6.3X7.7 2.00 65	
22		4X6.0 1.45 90	5X6.0 0.70 170	5X6.0 0.70 170	5X6.0 0.70 170	6.3X6.0 0.52 215	6.3X7.7 0.80 135	8X10.2 0.90 140	8X10.2 0.90 140
27	4X6.0 1.45 90								
33	→	5X6.0 0.70 170	→	6.3X6.0 0.39 250	6.3X6.0 0.39 250	6.3X7.7 0.44 243	8X10.2 0.35 280	8X10.2 0.90 140	10X10.2 0.50 220
47	5X6.0 0.70 170	→	6.3X6.0 0.39 250	6.3X6.0 0.39 250	6.3X6.0 0.39 250	6.3X7.7 0.44 243	8X10.2 0.35 280	10X10.2 0.50 220	12.5X13.5 0.24 500
56	5X6.0 0.70 170			6.3X6.0 0.39 250					
68	→	6.3X6.0 0.39 250	6.3X6.0 0.39 250	6.3X6.0 0.39 250	6.3X7.7 0.30 300				
100	6.3X6.0 0.39 250	→	6.3X6.0 0.39 250	6.3X7.7 0.30 300	8X10.2 0.15 600	8X10.2 0.22 400	10X10.2 0.20 480	12.5X13.5 0.24 500	16X16.5 0.14 800
150	6.3X6.0 0.39 250	6.3X6.0 0.39 250	6.3X7.7 0.30 300	8X10.2 0.15 600	8X10.2 0.15 600			12.5X13.5 0.24 500	16X16.5 0.14 800
220	6.3X6.0 0.39 250	6.3X7.7 0.30 300	6.3X7.7 0.30 300	8X10.2 0.15 600	8X10.2 0.15 600	10X10.2 0.13 585	12.5X13.5 0.14 800		
330	6.3X7.7 0.30 300	8X10.2 0.15 600	8X10.2 0.15 600	8X10.2 0.15 600	10X10.2 0.08 850	12.5X13.5 0.10 800		16X16.5 0.14 800	
470	8X10.2 0.15 600	8X10.2 0.15 600	8X10.2 0.15 600	10X10.2 0.08 850	12.5X13.5 0.058 1150		16X16.5 0.065 1410		
680	8X10.2 0.15 600	→	10X10.2 0.08 850		12.5X13.5 0.058 1150				
1000	8X10.2 0.15 600	10X10.2 0.08 850		12.5X13.5 0.058 1150		16X16.5 0.060 1610			
1500	10X10.2 0.08 850		12.5X13.5 0.058 1150		16X16.5 0.035 1800				
2200		12.5X13.5 0.058 1150		16X16.5 0.035 1800					
3300	12.5X13.5 0.058 1150		16X16.5 0.035 1800						
4700		16X16.5 0.035 1800							
6800	16X16.5 0.035 1800								

→ Use next higher voltage product.

Case size ; φD×L (mm)
16×16.5 ; CAE-KXT series

Ripple current mA r.m.s.
(100kHz, 105°C)

Model No. 16 CAE 470 KX
Series code
Capacitance symbol
Type code
Rated voltage

16 CAE 3300 KXT
Series code
Capacitance symbol
Type code
Rated voltage

Impedance (Ω)
MAX. at 100kHz, 20°C

*Add "V" suffix for optional RoHS compliant parts