



SURGE

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CAE-AX SERIES

SURFACE MOUNT TYPE LOW IMPEDANCE AT HIGH FREQUENCY

FEATURES

- CAE-AX SERIES IS LOW IMPEDANCE.
- CAE-AX SERIES CONTRIBUTES TOWARD MINITURIZATION OF ANY PRODUCTS
- SOLVENT PROOF (WITHIN 2 MINUTES)



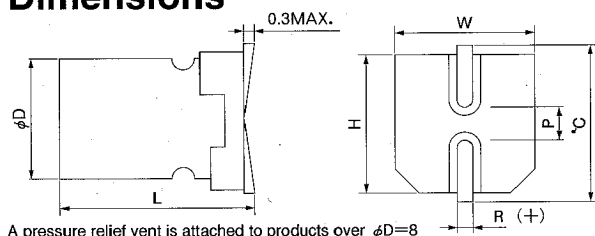
CAE-AX ← ultra low Z → CAE-GA

Specifications

Items		Specifications					
Rated voltage (V)		6.3	10	16	25	35	50
Operating temperature range (°C)		-55 to +105					
Capacitance tolerance (%)		±20 (120Hz)					
Tangent of loss angle (tan δ) (MAX.) (120Hz)	φ 4 to φ 6.3	0.24	0.20	0.16	0.14	0.12	0.12
	φ 8 to φ 16	0.28	0.24	0.20	0.16	0.14	0.14
0.02 to be added to the above value every time nominal capacitance exceeds 1000 μF.							
Leakage current (L.C.) (μA/after 2min.) (MAX.)		The greater value of either 0.01CV or 3					
Impedance (120Hz) ratio at low temperature (MAX.)	Z _{-40°C} /Z _{20°C}	3	2	2	2	2	2
	Z _{-55°C} /Z _{20°C}	5	4	4	3	3	3
High-temperature load 105°C rated voltage applied	Test time	2000hrs. (φ D ≤ 6.3, φ 10×7.7 : 1000hrs.)					
	ΔC/C	Within ±25% of the initial value					
	tan δ	≤ Twice the initial standard					
	L.C.	≤ The initial standard					
Resistance to soldering heat	Test	Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following conditions after being cooled to room temperature.					
	ΔC/C	Within ±10% of the initial value					
	tan δ	≤ The initial standard					
	L.C.	≤ The initial standard					
Other characteristics		Conform to IEC 60384-18					

(Unit :mm)

Dimensions



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

μF	6.3		10		16		25		35		50										
4.7									4×6.0	1.80	80	4×6.0	2.90	60							
10							4×6.0	1.80	80	5×6.0	0.76	150	6.3×6.0	0.88	165						
15							4×6.0	0.76	150	5×6.0	0.76	150	6.3×6.0	0.76	150						
22			4×6.0	1.80	80	5×6.0	0.76	150	5×6.0	0.76	150	5×6.0	0.76	150	6.3×6.0	0.88	165				
27	4×6.0	1.80	80						6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×7.7	0.68	195				
33				5×6.0	0.76	150						6.3×6.0	0.44	230	6.3×7.7	0.68	195				
47	5×6.0	0.76	150				6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×7.7	0.68	195			
56	5×6.0	0.76	150				6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×7.7	0.68	195			
68				6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×7.7	0.34	280			
100	6.3×6.0	0.44	230				6.3×6.0	0.44	230	6.3×7.7	0.34	280	6.3×7.7	0.34	280	8×10.2	0.39	300			
150	6.3×6.0	0.44	230	6.3×6.0	0.44	230	6.3×7.7	0.34	280	8×10.2	0.17	450	8×10.2	0.17	450	10×10.2	0.21	450			
220	6.3×6.0	0.44	230	6.3×7.7	0.34	280	6.3×7.7	0.34	280				10×7.7	0.17	450	10×7.7	0.17	450			
330	6.3×7.7	0.34	280	8×10.2	0.17	450	8×10.2	0.17	450	8×10.2	0.17	450	8×10.2	0.17	450	10×10.2	0.09	670	12.5×13.5	0.14	620
390																			12.5×13.5	0.14	620
470	8×10.2	0.17	450	8×10.2	0.17	450	8×10.2	0.17	450	10×10.2	0.09	670	12.5×13.5	0.066	900						
680	8×10.2	0.17	450	10×7.7	0.17	450							10×10.2	0.09	670				12.5×13.5	0.066	900
1000	8×10.2	0.17	450	10×7.7	0.17	450							10×10.2	0.09	670						
1500	10×10.2	0.09	670				12.5×13.5	0.066	900				16×16.5	0.052	1250						
2200				12.5×13.5	0.066	900				16×16.5	0.052	1250									
3300	12.5×13.5	0.066	900				16×16.5	0.052	1250												
4700				16×16.5	0.052	1250															
6800	16×16.5	0.052	1250																		

→Use next higher voltage product.

10×7.7 ; CAE-AXA series

φD×L

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

Model No. 16CAE470AX

10CAE470AXA

Capacitance symbol
Rated voltage

Capacitance symbol
Rated voltage

Impedance (Ω)
MAX. at 100kHz, 20°C