



## Surface Mount Type 105°C Standard



**RoHS  
Compliant**

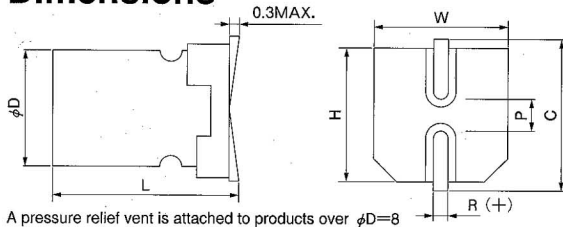
\*See Part Number System for Details

CAE-NT series (6.3 to 63V) has stable characteristics at the temperature of wide range (-55 to +105°C), and solvent proof (within 2 minutes).

### Specifications

Items		Specifications							
Rated voltage (V)		6.3	10	16	25	35	50	63	100
Operating temperature range (°C)		-55 to +105							
Capacitance tolerance (%)		±20 (120Hz)							
Tangent of loss angle (tan δ) (MAX.) (120Hz)	φ4 to φ6.3	0.24	0.20	0.16	0.14	0.12	0.10	0.12	0.10
	φ8 to φ16	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.10
		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/Z20°C	3	3	2	2	2	2	2	3
	Z-55°C/Z20°C	8	5	4	3	3	3	3	—
High-temperature load 105°C rated voltage applied	Test time	2000hrs. (φD ≤ 6.3, φ10×7.7 : 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							

### Dimensions



(Unit :mm)

D+0.5MAX.	L	W ±0.2	H ±0.2	C ±0.2	R	P ±0.2
4	5.4 <sup>+0.1</sup> <sub>-0.2</sub>	4.3	4.3	5.0	0.5 to 0.8	1.0
5	5.4 <sup>+0.1</sup> <sub>-0.2</sub>	5.3	5.3	6.0	0.5 to 0.8	1.4
6.3	5.4 <sup>+0.1</sup> <sub>-0.2</sub>	6.6	6.6	7.3	0.5 to 0.8	1.0
4	6.0 ±0.3	4.3	4.3	5.0	0.5 to 0.8	2.2
6.3	6.0 ±0.3	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	7.7 ±0.3	6.6	6.6	7.3	0.5 to 0.8	2.2
8	10.2 ±0.3	8.3	8.3	9.0	0.7 to 1.0	3.2
10	7.7 ±0.3	10.3	10.3	11.0	1.1 to 1.4	4.6
10	10.2 ±0.3	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	V	6.3	10	16	25	35	50	63	100
0.1 to 0.47							4×5.4 0.7 to 3.5	4×5.4 0.7 to 3.5	
1.0							4×5.4 7	4×5.4 7	4×6.0 7
2.2							4×5.4 11	4×5.4 11	6.3×6.0 14
3.3							4×5.4 13	5×5.4 14	6.3×6.0 20
4.7					4×5.4 13	4×5.4 14	5×5.4 16	5×5.4 16	6.3×6.0 25
10				4×5.4 18	5×5.4 20	5×5.4 21	6.3×5.4 24	6.3×5.4 24	6.3×7.7 35
22	4×5.4 22	5×5.4 25	5×5.4 27	6.3×5.4 36	6.3×5.4 38	6.3×6.0 42	6.3×7.7 49	8×10.2 84	
33	5×5.4 27	5×5.4 30	6.3×5.4 40	6.3×5.4 44	6.3×6.0 42	6.3×7.7 60	8×10.2 112	10×10.2 133	
47	5×5.4 33	6.3×5.4 41	6.3×5.4 48	6.3×6.0 48	6.3×6.0 49	6.3×7.7 63	8×10.2 119	12.5×13.5 240	
68							8×10.2 126	12.5×13.5 245	
82							10×7.7 140		
100	6.3×5.4 50	6.3×5.4 53	6.3×5.4 60	6.3×7.7 91	6.3×7.7 84	8×10.2 140	10×10.2 196	16×16.5 490	
150		6.3×6.0 62	6.3×7.7 95	8×10.2 140	8×10.2 155	10×7.7 155		16×16.5 500	
220	6.3×6.0 67	6.3×7.7 105	6.3×7.7 105	8×10.2 175	8×10.2 190	10×10.2 220	12.5×13.5 287		
330	6.3×7.7 105	8×10.2 195	8×10.2 195	8×10.2 220	10×10.2 300	12.5×13.5 365			
390			10×7.7 195			12.5×13.5 380			
470	8×10.2 210	8×10.2 210	8×10.2 230	10×10.2 300	12.5×13.5 410		16×16.5 630		
680			10×10.2 310			12.5×13.5 430			
1000	10×7.7 210								
1500	8×10.2 230	10×10.2 310			12.5×13.5 460		16×16.5 655		
2200	10×10.2 310		12.5×13.5 510			16×16.5 740			
3300		12.5×13.5 520		16×16.5 840					
4700			16×16.5 880						
6800		16×16.5 930							

Model No. 16CAE470NT

Capacitance symbol  
Rated voltage

φDXL

Ripple current  
mA r.m.s.  
(120Hz, 105°C)

\*Add "V" suffix for optional RoHS compliant parts