

CBFF

Solid electrolyte tantalum capacitor with reliability index



Features and uses

- Metal shell packaging, gas seal, cylindrical, axial lead-out, coat insulation casing, polarity;
- Excellent and stable electrical performance, high reliability, long life, good storage stability, loss Angle tangent and small leakage current, small volume, equivalent to the CSR13 model in MIL-C-39003E;
- DC or pulsating circuit suitable for aircraft, ship, vehicle, radar, electronic and other electronic equipment with reliability requirements.
- Implementation of the standard: GJB63B-2001, QJ / PWV 73-2002

basic mechanical design feature

- Temperature range: -55°C - + 125°C;
- see Application Guidance 4.1; Allowable deviation of capacity: K: ± 10%; M: ± 20%;
- Room temperature leakage current: 0.01 CU (A) or 0.5 μ A (large);
- Rated voltage, reduced voltage and nominal capacitance: see Table 1; Overall dimensions and maximum weight: see Figure 1 and Table 2;
- High and low temperature characteristics: not exceeding those specified in Table 3.

PART NUMBER EXAMPLE

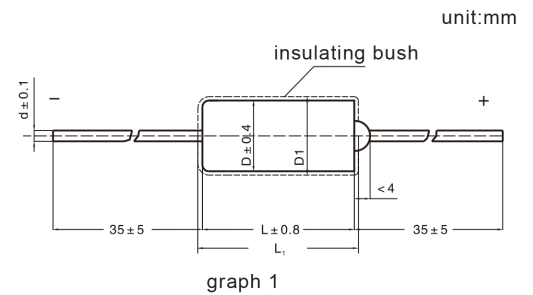
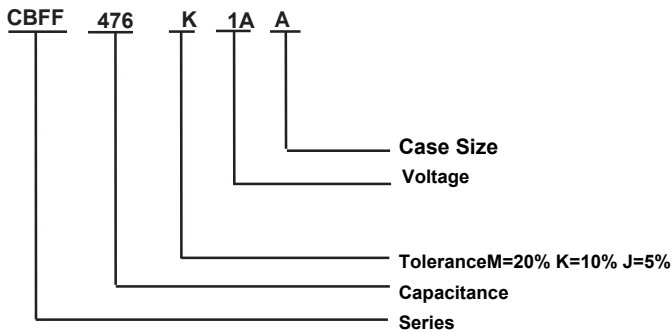


Table 1 Rated voltage, reduced voltage and nominal capacitance of the capacitor

rated voltage U _R (V)	6.3(6) 0J	10 1A	16(15) 1C	20 1D	25 1E	35(32) 1V	40 1G	50 1H	63(60) 1J	75 1M	100 2A
Case code	rated capacitance C _R (μF)										
A	5.6	3.9	2.7	1.2	2.2	0.10	0.1	0.047		0.10	0.047
	6.8	4.7	3.3	1.5		0.12	1.0	0.056		0.12	0.056
				1.8		0.15		0.068		0.15	0.068
				2.2		0.18		0.082		0.18	0.082
						0.22		0.1		0.22	0.10
						0.27		0.12		0.27	0.12
						0.33		0.15		0.33	0.15
						0.39		0.18		0.39	0.18
						0.47		0.22		0.47	0.22
						0.56		0.27		0.56	0.27
						0.68		0.33		0.68	0.33
						0.82		0.39			0.39
						1.0		0.47			0.47
								0.56			0.56
								0.68			
						0.82					
						1.0					

Table 1 (continued) capacitor rated voltage, reduced voltage and nominal capacity

rated voltage U.(V) 6.3 0J	10 1A	16(15)1C	20 1D	25 1E	35(32)1V	40 1G	50 1H	63(60)1J	75 1M	100 2A
Housing code nominal capacity C _R (μ F)										
B	47	27	18	8.2	3.3	1.2	1.2	1.0	0.82	0.68
	56	33	22	10	4.7	1.5	1.5	1.0	1.0	0.82
		39		12	6.8	1.8	1.8	1.2	1.2	1.0
				15	10	2.2	2.2	1.5	1.5	1.2
					15	2.7	2.7	1.8	1.8	1.5
						3.3	3.3	2.2	2.2	1.8
						3.9	3.9	2.7	2.7	2.2
						4.7	4.7	3.3	3.3	2.7
						5.6		3.9	3.9	
						6.8				
B1			22	22	33		10			
C	150	82	28	27		8.2		5.6	4.7	3.3
	180	100		33		10		6.8	5.6	3.9
		120		39		12		8.2	6.8	4.7
				47		15		10	8.2	
						18		12	10	
						22		15		
D1				47		33				
D2						47		22		
D	270	150	82	56	150	27		22	12	
	330	180	100	68		33		27	15	
	390	220	120	82		39		33		
	470	270	150	100		47		47		
		330	180	120		56				
				150		68				

Table 2 External dimensions and maximum weight of capacitors

Case code	maximum weight (g)	No insulation casing		Insulation casing		d±0.1 (mm)
		D±0.4(mm)	L±0.8(mm)	D,max(mm)	L,max(mm)	
A	0.7	3.2	6.5	3.9	8.2	0.5
B	2.3	4.5	11.0	5.2	12.7	0.5
B1	3.0	6.0	14.0	6.7	15.7	0.6
C	6.5	7.0	16.5	7.7	18.2	0.6
D1	6.0	8.0	14.0	8.7	15.7	0.8
D2	8.0	8.0	22.0	8.7	23.7	0.8
D	11	8.6	19.0	9.3	20.7	0.6

Table 3. Characteristics of high and low temperature

nominal capacity C _n (μF)	Capitance change (%)			Loss angle tangent value max (%)				Leakage current max (μ A)	
	-55℃	+85℃	+125℃	-55℃	+25℃	+85℃	+125℃	+85℃	+125℃
≤1.0	±8	±8	±12	2	2	3	3	8I ₀	10I ₀
1.2~5.6				3	3	3	3		
6.8~82				5	5	5	5		
100~330				6	6	6	6		
390~470				8	8	8	8		

- Note: 1. It is forbidden to use tantalum capacitors regardless of polarity;
 2. The measuring frequency of capacitance and loss angle tangent is 100Hz, and the DC bias voltage is $U_{-}=2.2^{0}_{-1.0}V$, AC bias voltage $U_{\sim}=1.0^{0}_{-0.5}V$ (valid value),The measurement method adopts the series-connected equivalent circuit;
 3. Products of special size with large capacity or exceeding this standard can be negotiated with our company;
 4. Apply a derated voltage measurement when measuring the 125℃ leakage current.