



Type CD11C Super-Miniature Aluminum Electrolytic Capacitors

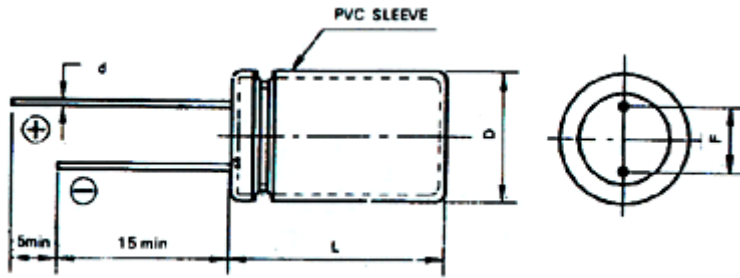
Features and Applications:

- Load life of 1,000 hours at 85°C.
- 7mm L, Standard type.
- Suitable for high-density electronic equipment, such as VTR, video camera, car radio, micro cassette tape recorder, etc.

Performance and Characteristics:

Item	Characteristics									
Operating temperature range	-40~+85°C									
Rated voltage range	4~100V									
Capacitance range	0.1~330μF									
Capacitance tolerance (at 20°C, 120Hz)	±20%(M)									
Leakage current(I) (at 20°C)	After 2 minute application of rated voltage $I \leq 0.01C_R U_R$ or $3\mu A$, whichever is greater. Where C_R : Nominal capacitance in μF , U_R : Rated voltage in V									
Dissipation factor (tg δ) (at 20°C, 120Hz)	W.V.(V)	4	6.3	10	16	25	35	50	63	100
	tg δ (max.)	0.35	0.24	0.2	0.16	0.14	0.12	0.1	0.09	0.08
Low temperature characteristics (at 120Hz)	W.V.(v)	4	6.3	10	16~35			50~100		
	Impedance ratio	Z-25°C/Z+20°C	6	4	3	2				
	ZT/Z+20°C (max.)	Z-40°C/Z+20°C	12	8	6	4		3		
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage has been applied for 1,000 hours at 85°C									
	Capacitance change	≤20% of the initial value								
	tg δ	≤150% of the initial specified value								
	I	≤The initial specified value								
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 85°C for 500 hours without voltage applied.									
	Capacitance change	≤20% of the initial value								
	tg δ	≤150% of the initial specified value								
	I	≤200% of the initial specified value								

Dimensions



D±0.5	4	5	6.3	8
L±1.0	7			
F±0.5	1.5	2	2.5	3.5
d±0.05	0.45			

Nominal Capacitance, Case Size D × L(mm) and Maximum Ripple current(mA/at 85 °C,120Hz)

W.V.(v)	4		6.3		10		16		25		35		50		63		100	
Cap.(μF)	4		6.3		10		16		25		35		50		63		100	
0.1													4×7	1.3	4×7	1.7		
0.22													4×7	2.9	4×7	3.7		
0.33													4×7	4.4	4×7	5.5		
0.47													4×7	6.3	4×7	7.7		
1													4×7	11	4×7	11	4×7	12
2.2													4×7	16	4×7	17	5×7	20
3.3								4×7	16	4×7	18	4×7	19	4×7	20	6.3×7	28	
4.7								4×7	20	4×7	21	4×7	23	4×7	24	6.3×7	34	
10							4×7	27	4×7	28	4×7	31	5×7	38	6.3×7	26		
22			4×7	32	4×7	35	4×7	40	5×7	48	5×7	52	6.3×7	65				
33	4×7	33	4×7	40	4×7	43	5×7	55	6.3×7	67	6.3×7	73						
47	4×7	39	4×7	47	4×7	52	5×7	65	6.3×7	80	6.3×7	87						
100	5×7	64	5×7	78	6.3×7	98	6.3×7	109	8×9	135								
220	6.3×7	110	6.3×7	133	6.3×7	168	8×9	187										
330	8×9	155	8×9	187														

Ripple Current Multipliers

Frequency multiplying factor

Freq.(Hz)	50	120	300	1k	10k
Cap.(μF)					
0.1~47	0.75	1	1.35	1.57	2
100~330	0.8	1	1.23	1.34	1.5

Temperature multiplying factor

Temperature(°C)	45	65	85
Factor	1.59	1.23	1.00