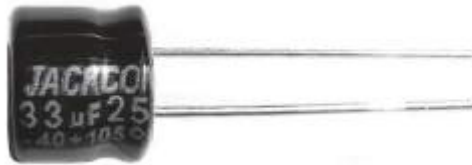


# Datasheet

## Aluminium Electrolytic Capacitor

RS Stock number 706-0488



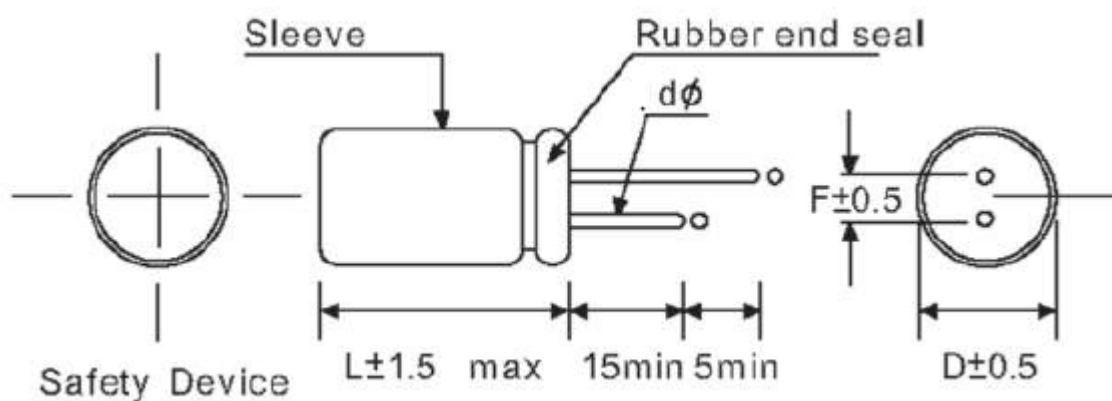
### Specifications:

Item	Performance Characteristics																								
Operating Temperature Range	-40 to +105°C																								
Rated Voltage Range	4 to 50 VDC																								
Capacitance Tolerance	± 20% (120Hz, +20°C)																								
Capacitance Range	0.1 to 220 µF																								
Leakage Current (+20°C max.)	I < 0.01 CV or 3 (µA) After 2 minutes whichever is greater measured with rated working voltage applied.																								
Dissipation Factor	<table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>D.F. (%) max.</td> <td>35</td> <td>28</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> </tr> </tbody> </table> <p>(+20°C at 120Hz)</p>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	D.F. (%) max.	35	28	24	20	16	14	12								
Working Voltage (VDC)	4	6.3	10	16	25	35	50																		
D.F. (%) max.	35	28	24	20	16	14	12																		
Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio max.</p> <table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z (-25°C)/Z (+20°C)</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z (-40°C)/Z (+20°C)</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	Z (-25°C)/Z (+20°C)	7	4	3	2	2	2	2	Z (-40°C)/Z (+20°C)	15	8	6	4	4	4	4
Working Voltage (VDC)	4	6.3	10	16	25	35	50																		
Z (-25°C)/Z (+20°C)	7	4	3	2	2	2	2																		
Z (-40°C)/Z (+20°C)	15	8	6	4	4	4	4																		
Load Life	<p>Test Conditions:</p> <p>Duration time: 1000Hrs</p> <p>Ambient temperature: +105°C</p> <p>Applied voltage: Rated DC working voltage</p> <p>After test requirements : ≤ 30% of the initial measured value</p> <p>Dissipation Factor: ≤ 200% of the initial specified value</p> <p>Leakage Current: ≤ the initial specified value</p>																								
Shelf Life	<p>Test Conditions:</p> <p>Duration time: 1000Hrs</p> <p>Ambient temperature: +105°C</p> <p>Applied voltage: None</p> <p>After test requirements at +20°C: Same limits as load life</p> <p>Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes</p>																								

**Features:**

- 5.0 +1mm max. height
- Load life 105°C, 1000hours assured

**Diagram of Dimensions:**



(Unit: mm)

D	4	5	6.3	8
F	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
φd	0.45			

**Ripple Current & Temperature**

Temperature(°C)	45	65	85	105
Multiplier	2.0	1.6	1.25	1.0

**Ripple Current & Frequency Multiplier**

Cap.(μF) \ Freq.(Hz)		50(60)	120	1K	10K
		0.1~47	0.8	1.0	1.30
Multiplier	56UP	0.8	1.0	1.15	1.20

Case Size

Ø D x L (mm)

W.V. (S.V.) uF	4 {5}		6.3 {8}		10 {13}		16 {20}		25 {32}		35 {44}		50 {63}		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
0.1	→											3x5 4x5	1.0 1.0		
0.22	→											3x5 4x5	2.0 2.0		
0.33	→											3x5 4x5	2.8 2.8		
0.47	→											3x5 4x5	3.8 4.0		
1	→											3x5 4x5	6.2 8.0		
2.2	→											3x5 4x5	8.0 10		
3.3	→											3x5	9.0	4x5	17
4.7	→					3x5 4x5	9.0 15	3x5 4x5	10 18	4x5	20	4x5	20		
10	→					3x5 4x5	18 20	4x5	25	5x5	29	6x5	30		
22	→					4x5	30	5x5	40	6x5	46	6x5	54		
33	4x5	26	4x5	30	4x5	35	5x5	40	6x5	50	6x5	60	8x5	68	
47	4x5	35	4x5	38	5x5	46	5x5 6x5	50 58	6x5	62	8x5	72	-	-	
68	4x5	49	5x5	55	6x5	60	6x5	72	8x5	75	-	-	-	-	
100	5x5	58	5x5	60	6x5	76	6x5	86	8x5	92	-	-	-	-	
220	6x5	74	6x5	90	6x5	90	8x5	92	-	-	-	-	-	-	

Ripple Current(mA,rms)at105□120Hz