

Surface Mount Aluminum Electrolytic

CH [Ultra Low Impedance & High Temperature]

125°C 2000 Hours, Ultra Low Impedance High Temperature

ELECTRICAL CHARACTERISTICS

Operation Temperature Range	-40 ~ +125°C																					
Rated Voltage Range	6.3 ~ 50VDC																					
Rated Capacitance Range	47 ~ 1000μF																					
Capacitance Tolerance	±20% at 120Hz, 20°C																					
Leakage Current (Max. 20°C)	$I \leq 0.01CV$ or $3\mu A$ (After Rated Voltage Applied for 2 Minutes) I = Leakage Current (μA), C =Nominal Capacitance (μF), V =Rated Voltage (V)																					
Dissipation Factor (Max.) (tanδ) (120Hz, 20°C)	Shown in the table of standard rating																					
Low Temperature Stability	Impedance Ratio (Max.) <table border="1" style="margin-left: 20px;"> <tr> <td>WV (V):</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Z-25°C/Z+20°C:</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C:</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	WV (V):	6.3	10	16	25	35	50	Z-25°C/Z+20°C:	2	2	2	2	2	2	Z-40°C/Z+20°C:	3	3	3	3	3	3
WV (V):	6.3	10	16	25	35	50																
Z-25°C/Z+20°C:	2	2	2	2	2	2																
Z-40°C/Z+20°C:	3	3	3	3	3	3																
Endurance	After the rated voltage has been applied at 125°C for 1000~2000 hours, the capacitors shall meet the following requirements. (a) Capacitance Change: Within ±30% of the Initial Value (b) Dissipation Factor: Not Exceeding 300% of Specified Value (c) Leakage Current: Not Exceeding the Specified Value <table border="1" style="margin-left: 20px;"> <tr> <td>Dø:</td> <td>$8 \times 6.5\phi$</td> <td>$\geq 8 \times 10.5\phi$</td> </tr> <tr> <td>Load Life:</td> <td>1000hrs</td> <td>2000hrs</td> </tr> </table>	Dø:	$8 \times 6.5\phi$	$\geq 8 \times 10.5\phi$	Load Life:	1000hrs	2000hrs															
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Load Life:	1000hrs	2000hrs																				
Shelf Life	After having been placed at 125°C without voltage applied for 1000 hours (500 hours for 8×6.5), the capacitors shall meet the same requirements as Endurance.																					

DIAGRAM OF DIMENSIONS

Dø	L	A	H	I	W	P	K
8.0	6.5	8.3	9.5 Max.	3.4	0.65 ± 0.1	2.2 ± 0.2	0.35 ^{+0.15} _{-0.75}
8.0	10.5	8.3	10.0 Max.	3.4	0.90 ± 0.2	3.1 ± 0.2	0.70 ± 0.2
10.0	10.5	10.3	12.0 Max.	3.5	0.90 ± 0.2	4.6 ± 0.2	0.70 ± 0.2



FEATURE

125°C 2,000 hours, higher temperature range, low profile vertical chip, low impedance

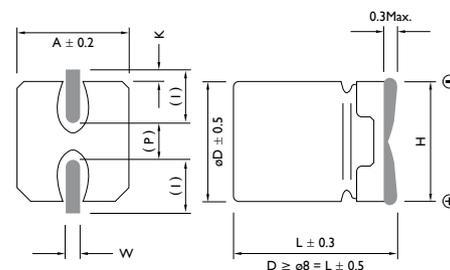
Applications: Automatic Mounting and Reflow Soldering

MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

FREQUENCY (Hz)	120	1K	10K	100K
COEFFICIENT	0.70	0.80	0.90	1.00

Dimensions: mm



() Reference Size



CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μ F)	RATED VOLTAGE WV (SURGE VOLTAGE WV)											
	6.3 (8)				10 (13)				16 (20)			
	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	ESR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	ESR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	ESR
100	8 x 6.5	100	0.30	0.50	8 x 6.5	100	0.26	0.50	8 x 6.5	100	0.20	0.50
150	8 x 6.5	100	0.30	0.50	8 x 6.5	100	0.26	0.50	8 x 10.5	197	0.20	0.30
220	8 x 6.5	100	0.30	0.50	8 x 10.5	197	0.26	0.30	8 x 10.5	197	0.20	0.30
330	8 x 10.5	197	0.30	0.30	8 x 10.5	197	0.26	0.30	8 x 10.5	197	0.20	0.30
470	8 x 10.5	197	0.30	0.30	10 x 10.5	297	0.26	0.20	10 x 10.5	297	0.20	0.20
680	10 x 10.5	297	0.30	0.20	10 x 10.5	297	0.26	0.20				
1000	10 x 10.5	297	0.30	0.20								

Note: 1. Ripple Current: (mA/rms) 125°C, 100KHz

2. Dissipation Factor: 20°C, 120Hz

3. ESR: 100KHz / 20°C (Ω Max.)

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μ F)	RATED VOLTAGE WV (SURGE VOLTAGE WV)											
	25 (32)				35 (44)				50 (63)			
	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	ESR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	ESR	SIZE	RIPPLE CURRENT	DISSIPATION FACTOR	ESR
47	8 x 6.5	100	0.18	0.50	8 x 10.5	197	0.14	0.30	8 x 10.5	133	0.12	0.75
100	8 x 10.5	197	0.18	0.30	8 x 10.5	197	0.14	0.30	10 x 10.5	221	0.12	0.50
150	8 x 10.5	197	0.18	0.30	10 x 10.5	297	0.14	0.20				
220	10 x 10.5	297	0.18	0.20	10 x 10.5	297	0.14	0.20				
330	10 x 10.5	297	0.18	0.20								

Note: 1. Ripple Current: (mA/rms) 125°C, 100KHz

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3. ESR: 100KHz / 20°C (Ω Max.)