

Features

- 4 ϕ ~ 10 ϕ , 105°C, 2,000 hours assured
- Vertical chip type miniaturized, Low impedance capacitors
- Designed for surface mounting on high density PC board
- RoHS compliance
- AEC-Q200 qualified

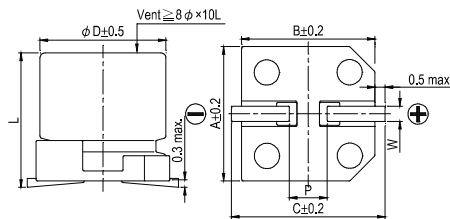


Marking color: Black

Specifications

Items	Performance																							
Category Temperature Range	-55°C ~ +105°C																							
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)																							
Leakage Current (at 20°C)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																							
Tanδ (at 120 Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</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>Tanδ (max)</td> <td>0.30</td> <td>0.26</td> <td>0.22</td> <td>0.16</td> <td>0.13</td> <td>0.13</td> </tr> </tbody> </table>	Rated Voltage	6.3	10	16	25	35	50	Tanδ (max)	0.30	0.26	0.22	0.16	0.13	0.13									
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Diagram of Dimensions



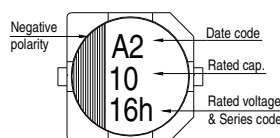
Lead Spacing and Diameter

Unit: mm

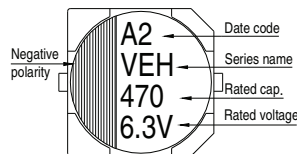
ϕD	L	A	B	C	W	P ± 0.2
4	5.7 ± 0.3	4.3	4.3	5.1	0.5 ~ 0.8	1.0
5	5.7 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	5.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	10 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	10 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.3	4.7

Marking

$\phi D \leq 6.3$ mm



$\phi D = 8 \sim 10$ mm



Dimension: $\phi D \times L$ (mm)
 Ripple Current: mA/rms at 100k Hz, 105°C
 Impedance: Ω / at 100k Hz, 20°C

Dimension and Permissible Ripple Current

Rated Volt. (V _{DC})		6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)			50V (1H)		
Cap. (μ F)	Contents	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA
3.3	3R3																4x5.7	5.0	30
4.7	4R7										4x5.7	3.2	65	4x5.7	3.2	65	4x5.7	5.0	30
10	100							4x5.7	3.2	65	5x5.7	1.5	110	5x5.7	1.5	110	5x5.7	3.0	50
22	220				4x5.7	3.2	65	5x5.7	1.5	110	6.3x5.7	0.85	170	6.3x5.7	0.85	170	6.3x5.7	2.0	70
33	330	4x5.7	3.2	65	5x5.7	1.5	110	6.3x5.7	0.85	170	6.3x5.7	0.85	170	6.3x5.7	0.85	170	8x10	0.6	300
47	470	5x5.7	1.5	110	6.3x5.7	0.85	170	6.3x5.7	0.85	170	6.3x5.7	0.85	170	8x10	0.45	450	8x10	0.6	300
100	101	6.3x5.7	0.85	170	6.3x5.7	0.85	170	8x10	0.45	450	8x10	0.45	450	8x10	0.45	450	8x10	0.6	300
150	151	6.3x5.7	0.85	170	6.3x5.7	0.85	170	8x10	0.45	450	8x10	0.45	450	8x10	0.45	450	10x10	0.3	500
220	221	6.3x5.7	0.85	170	8x10	0.45	450	8x10	0.45	450	8x10	0.45	450	10x10	0.25	670			
330	331	8x10	0.45	450	8x10	0.45	450	8x10	0.45	450	10x10	0.25	670						
470	471	8x10	0.45	450	8x10	0.45	450	10x10	0.25	670									
820	821	10x10	0.25	670	10x10	0.25	670												
1,000	102	10x10	0.25	670															

Part Numbering System

VEH Series 470 μ F \pm 20% 6.3V Carrier Tape 8 ϕ x 10L

VEH **471** **M** **0J** **TR** - **0810** **XX**

Series Name Capacitance Capacitance Tolerance Rated Voltage Package Type Terminal Type Case Size

S = Standard
KS = AEC-Q200 Qualified, Safety Critical Application
LS = AEC-Q200 Qualified, Non-Safety Critical Application