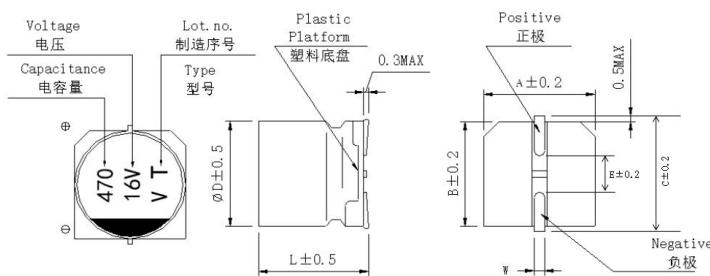


**VZ**

- Low Impedance; Suitable for Reflow Soldering
- Endurance 2000 hours at 105°C
- Comply with the RoHS

**DRAWING & DIMENSIONS** (Unit: mm)

Category	Temperature Range	-55+105°C																														
Voltage Range	6.3-100V.DC																															
Capacitance Tolerance	±20%(120Hz,20°C)																															
Leakage Current	I≤0.01CV(μA)or 3μA whichever is greater (2 minutes)																															
Dissipation Factor (120Hz, 20°C)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>WV</th><th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>80</th><th>100</th></tr> </thead> <tbody> <tr> <td>tgδ</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.08</td><td>0.08</td><td>0.08</td></tr> </tbody> </table> <p>For capacities greater than 1000 μF, for every increase of 1000 μF, the dissipation factor increases by 0.02.</p>	WV	6.3	10	16	25	35	50	63	80	100	tgδ	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08	0.08											
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Equivalent Series Resistance (100KHz, 20°C)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>WV</th><th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>80</th><th>100</th></tr> </thead> <tbody> <tr> <td>Z<sub>-25°C</sub>/Z<sub>+20°C</sub></td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr> <td>Z<sub>-40°C</sub>/Z<sub>+20°C</sub></td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr> </tbody> </table>	WV	6.3	10	16	25	35	50	63	80	100	Z <sub>-25°C</sub> /Z <sub>+20°C</sub>	2	2	2	2	2	2	2	2	2	Z <sub>-40°C</sub> /Z <sub>+20°C</sub>	3	3	3	3	3	3	3	3	3	
WV	6.3	10	16	25	35	50	63	80	100																							
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Z <sub>-40°C</sub> /Z <sub>+20°C</sub>	3	3	3	3	3	3	3	3	3																							
Endurance	In an environment of +105°C, apply the operating voltage with ripple current for 2000 hours, and after 16 hours of recovery, the product performance meets the following requirements:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Voltage</td><td>6.3-16V</td><td>25-100V</td></tr> <tr> <td>Capacitance Change</td><td>Within ±20% of initial measured value</td><td>Within ±20% of initial measured value</td></tr> <tr> <td>Dissipation Factor</td><td>≤ 200% of initial specified value</td><td>≤ 200% of initial specified value</td></tr> <tr> <td>Leakage Current</td><td>≤ initial specified value</td><td>≤ initial specified value</td></tr> </table>	Voltage	6.3-16V	25-100V	Capacitance Change	Within ±20% of initial measured value	Within ±20% of initial measured value	Dissipation Factor	≤ 200% of initial specified value	≤ 200% of initial specified value	Leakage Current	≤ initial specified value	≤ initial specified value																		
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Leakage Current	≤ initial specified value	≤ initial specified value																														
Shelf Life	In an environment of +105°C, placed for 1000 hours, and after 16 hours of recovery, the product performance meets the following requirements:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Capacitance Change</td><td>Within ±20% of initial measured value</td></tr> <tr> <td>Dissipation Factor</td><td>≤ 100% of initial specified value</td></tr> </table>	Capacitance Change	Within ±20% of initial measured value	Dissipation Factor	≤ 100% of initial specified value																										
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Welding	In an environment of +250°C, remains on the hot plate for 30 seconds, and after 16 hours of recovery, the product performance meets the following requirements:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Capacitance Change</td><td>Within ±10% of initial measured value</td></tr> <tr> <td>Dissipation Factor</td><td>≤ initial specified value</td></tr> <tr> <td>Leakage Current</td><td>≤ initial specified value</td></tr> </table>	Capacitance Change	Within ±10% of initial measured value	Dissipation Factor	≤ initial specified value	Leakage Current	≤ initial specified value																								
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**DRAWING & DIMENSIONS** (Unit: mm)

D	L	A	B	C	E	W
4	5.4	1.8	4.3	4.3	1.0	0.5-0.9
5	5.4	2.2	5.3	5.3	1.3	0.5-0.9
6.3	5.4	2.6	6.6	6.6	2.2	0.5-0.9
6.3	7.7	2.6	6.6	6.6	2.2	0.5-0.9
8	6.2	2.9	8.3	8.3	3.1	0.9-1.1
8	10.5	2.9	8.3	8.3	3.1	0.9-1.1
10	10.5	3.3	10.3	10.2	4.5	0.9-1.1

**FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT**

Frequency(Hz)	50Hz	120Hz	300Hz	1KHz	≥10KHz
Coefficient	0.35	0.50	0.64	0.83	1.00

**VZ****NOMINAL CAPACITANCE, RATED VOLTAGE & DIMENSIONS**

Rated Voltage (V)	Nominal Capacitance (uF)	Dimensions (mm)	Ripple Current (mA)	Part Number	Rated Voltage (V)
6.3V (0J)	22	4X5.4	2.20	80	VZ0J220M045NAZH00000
	33	5X5.4	1.20	150	VZ0J330M055NBZH00000
	47	5X5.4	1.20	150	VZ0J470M055NBZH00000
	100	6.3X5.4	0.58	230	VZ0J101M6L5NCZH00000
	150	6.3X5.4	0.58	230	VZ0J151M6L5NCZH00000
	220	6.3X5.4	0.58	243	VZ0J221M6L5NCZH00000
		6.3X7.7	0.34	280	VZ0J221M6L7PCZH00000
	330	6.3X7.7	0.34	280	VZ0J331M6L7PCZH00000
	470	8X10.5	0.17	450	VZ0J471M081ADZH00000
	1000	8X10.5	0.17	450	VZ0J102M081ADZH00000
		10X10.5	0.10	670	VZ0J102M101AEZH00000
	1500	10X10.5	0.10	670	VZ0J152M101AEZH00000
10 (1A)	22	4X5.4	2.20	80	VZ1A220M045NAZH00000
	33	5X5.4	1.20	150	VZ1A330M055NBZH00000
	47	6.3X5.4	0.58	230	VZ1A470M6L5NCZH00000
	100	6.3X7.7	0.34	280	VZ1A101M6L7PCZH00000
	150	6.3X7.7	0.34	280	VZ1A151M6L7PCZH00000
	220	6.3X7.7	0.34	280	VZ1A221M6L7PCZH00000
	330	8X10.5	0.17	450	VZ1A331M081ADZH00000
	470	8X10.5	0.17	450	VZ1A471M081ADZH00000
	1000	10X10.5	0.10	670	VZ1A102M101AEZH00000
	1000	10X10.5	0.10	670	VZ1A102M101AEZH00000
16V (1C)	10	4X5.4	2.20	80	VZ1C100M045NAZH00000
	22	5X5.4	1.20	150	VZ1C220M055NBZH00000
	33	6.3X5.4	0.58	230	VZ1C330M6L5NCZH00000
	47	6.3X5.4	0.58	230	VZ1C470M6L5NCZH00000
	100	6.3X5.4	0.52	230	VZ1C101M6L5NCZH00000
		6.3X7.7	0.34	280	VZ1C101M6L7PCZH00000
	150	6.3X7.7	0.34	280	VZ1C151M6L7PCZH00000
	220	6.3X7.7	0.34	384	VZ1C221M6L7PCZH00000
		8X10.5	0.17	450	VZ1C221M081ADZH00000
	330	8X10.5	0.17	450	VZ1C331M081ADZH00000
	470	8X10.5	0.17	450	VZ1C471M081ADZH00000
		10X10.5	0.10	670	VZ1C471M101AEZH00000
	1000	10X10.5	0.10	670	VZ1C102M101AEZH00000
25 (1E)	4.7	4X5.4	2.20	80	VZ1E4R7M045NAZH00000
	10	4X5.4	2.20	80	VZ1E100M045NAZH00000
	22	6.3X5.4	0.58	230	VZ1E220M6L5NCZH00000
	33	6.3X5.4	0.58	230	VZ1E330M6L5NCZH00000
	47	6.3X7.7	0.34	280	VZ1E470M6L7PCZH00000
	100	6.3X7.7	0.34	280	VZ1E101M6L7PCZH00000
		8X6.2	0.26	300	VZ1E101M086MDZH00000
	150	8X10.5	0.17	450	VZ1E151M081ADZH00000
	220	8X10.5	0.17	450	VZ1E221M081ADZH00000
	330	10X10.5	0.10	670	VZ1E331M101AEZH00000
	470	10X10.5	0.10	670	VZ1E471M101AEZH00000

Rated ripple current: (105°C, 120Hz); Impedance: (20°C, 10KHz)

**VZ****NOMINAL CAPACITANCE, RATED VOLTAGE & DIMENSIONS**

Rated Voltage (V)	Nominal Capacitance (uF)	Dimensions (mm)	Ripple Current (mA)	Part Number	Rated Voltage (V)
35V (1V)	4.7	4X5.4	2.20	80	VZ1V4R7M045NAZH00000
	10	5X5.4	1.20	150	VZ1V100M055NBZH00000
	22	6.3X5.4	0.58	230	VZ1V220M6L5NCZH00000
	33	6.3X5.4	0.58	230	VZ1V330M6L5NCZH00000
	47	6.3X7.7	0.34	280	VZ1V470M6L7PCZH00000
	100	8X10.5	0.17	450	VZ1V101M081ADZH00000
	150	10X10.5	0.10	670	VZ1V151M101AEZH00000
	220	8X10.5	0.17	587	VZ1V221M081ADZH00000
		10X10.5	0.10	670	VZ1V221M101AEZH00000
	330	10X10.5	0.10	670	VZ1V331M101AEZH00000
50V (1H)	1.0	4X5.4	4.50	60	VZ1H1R0M045NAZH00000
	2.2	4X5.4	4.50	60	VZ1H2R2M045NAZH00000
	3.3	4X5.4	4.50	60	VZ1H3R3M045NAZH00000
	4.7	5X5.4	3.50	85	VZ1H4R7M055NBZH00000
	10	6.3X5.4	1.80	165	VZ1H100M6L5NCZH00000
	22	6.3X7.7	1.60	185	VZ1H220M6L7PCZH00000
	33	6.3X7.7	1.60	185	VZ1H330M6L7PCZH00000
	47	8X10.5	0.40	300	VZ1H470M081ADZH00000
		10X10.5	0.30	342	VZ1H470M101AEZH00000
	68	10X10.5	0.30	342	VZ1H680M101AEZH00000
	100	10X10.5	0.22	670	VZ1H101M101AEZH00000
	150	10X10.5	0.20	670	VZ1H151M101AEZH00000
	220	10X10.5	0.18	670	VZ1H221M101AEZH00000
	4.7	5X5.4	3.00	50	VZ1J4R7M055NBZH00000
63V (1J)	10	6.3X5.4	1.50	80	VZ1J100M6L5NCZH00000
		6.3X7.7	1.20	120	VZ1J100M6L7PCZH00000
	22	6.3X7.7	1.20	120	VZ1J220M6L7PCZH00000
		8X6.2	1.20	120	VZ1J220M086MDZH00000
	33	8X10.5	0.65	250	VZ1J330M081ADZH00000
	47	8X10.5	0.65	250	VZ1J470M081ADZH00000
	68	8X10.5	0.65	250	VZ1J680M081ADZH00000
	100	10X10.5	0.35	400	VZ1J101M101AEZH00000
80V (1K)	3.3	5X5.4	5.00	25	VZ1K3R3M055NBZH00000
	4.7	6.3X5.4	3.00	40	VZ1K4R7M6L5NCZH00000
	10	6.3X7.7	2.40	60	VZ1K100M6L7PCZH00000
	22	8X10.5	1.30	130	VZ1K220M081ADZH00000
	33	8X10.5	1.30	130	VZ1K330M081ADZH00000
	47	10X10.5	0.70	200	VZ1K470M101AEZH00000
100V (2A)	22	8X10.5	1.30	130	VZ2A220M081ADZH00000
	33	10X10.5	0.70	200	VZ2A330M101AEZH00000

Rated ripple current: (105°C, 120Hz); Impedance: (20°C, 10KHz)