

# RVZ Series

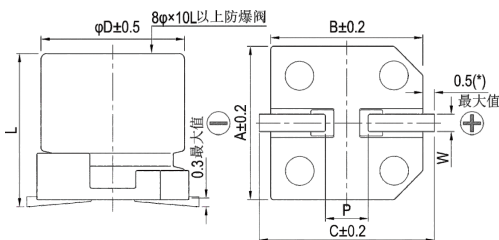
- Available for reflow soldering. Available for high density surface mounting.
- Low Impedance.
- Load life 2,000~3,000 hours at 105°C.
- Adapter to the RoHS. REACH directive.



## ◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-55 ~ +105°C
Working Voltage Range	6.3 ~ 50Vdc
Capacitance Range	1 ~ 1500 μF
Capacitance Tolerance	±20% (at 20°C and 120Hz)
Dissipation Factor (tanδ) (at 20°C, 120Hz)	Rated Voltage (V)    6.3    10    16    25    35    50
	Tanδ(Max)            0.26   0.20   0.16   0.14   0.12   0.10
Leakage Current	I=0.01CV or 3 μA, whichever is greater I : Leakage current (μA)    C : Rated capacitance (μF)    V : Rated voltage (V)    Impress the rated voltage for 2 minutes
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)    6.3    10    16    25    35    50
	Z(-25°C)/Z(+20°C)    4    3    2    2    2    2
	Z(-55°C)/Z(+20°C)    12    8    6    4    3    3
	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2,000 (3,000 hours for Φ8~Φ10) hours at 105°C .
	Capacitance change            ≙ ±30% of the initial value
	Dissipation factor(tanδ)        ≙ 300% of the specified value
	Leakage current                 ≙ specified value
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.
	Capacitance change            ≙ ±30% of the initial value
	Dissipation factor(tanδ)        ≙ 300% of the specified value
	Leakage current                 ≙ 200% of the specified value
Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds.After reflow soldering and restored at room temperature, they meet the characteristics requirements listed below.
	Capacitance change            ≙ ±10% of the initial value
	Dissipation factor(tanδ)        ≙ specified value
	Leakage current                 ≙ specified value

## ◆ DIMENSIONS (mm)

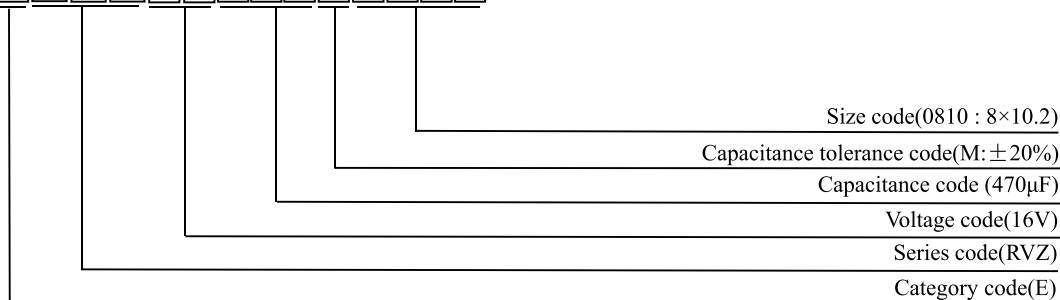


Note:(\*):4~6.3Φ 0.4Max

ΦD	L	A	B	C	W	P±0.2
4	5.4±0.3	4.3	4.3	5.0	0.5~0.8	1.0
5	5.4±0.3	5.3	5.3	6.0	0.5~0.8	1.9
6.3	5.4±0.5	6.6	6.6	7.2	0.5~0.8	1.9
6.3	7.7±0.5	6.6	6.6	7.2	0.5~0.8	3.1
8	10.2±0.5	8.3	8.3	9.1	0.8~1.1	3.1
10	10.2±0.5	10.3	10.3	11.1	0.8~1.1	4.5

## ◆ PART NUMBER SYSTEM( Example : 16V 470μF )

E R V Z 1 C 4 7 1 M 0 6 0 7



## RVZ Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 100KHz; Impedance: ( $\Omega$ ) at 20°C / 100KHz

$\mu\text{F}$	Vdc	6.3V			10V			16V		
		$\Phi\text{D} \times \text{L}$	Z	RC	$\Phi\text{D} \times \text{L}$	Z	RC	$\Phi\text{D} \times \text{L}$	Z	RC
10							4×5.4	2.0	80	
22		4×5.4	2.0	80	4×5.4	2.0	80	5×5.4	1.0	150
33		5×5.4	1.0	150	5×5.4	1.0	150	6.3×5.4	0.50	230
47		5×5.4	1.0	150	6.3×5.4	0.50	230	6.3×5.4	0.50	230
100		6.3×5.4	0.50	230	6.3×5.4	0.50	230	6.3×5.4	0.50	230
								6.3×7.7	0.36	280
150		6.3×5.4	0.50	230	6.3×5.4	0.50	230	6.3×7.7	0.36	280
220		6.3×7.7	0.36	280	6.3×7.7	0.36	280	6.3×7.7	0.36	280
								8×10.2	0.17	450
330		6.3×7.7	0.36	280	8×10.2	0.17	450	8×10.2	0.17	450
470		8×10.2	0.17	450	8×10.2	0.17	450	8×10.2	0.17	450
								10×10.2	0.10	670
680		8×10.2	0.17	450	10×10.2	0.10	670	10×10.2	0.17	670
1000		8×10.2	0.17	450	10×10.2	0.10	670			
		10×10.2	0.10	670						
1500		10×10.2	0.10	670						

$\mu\text{F}$	Vdc	25V			35V			50V		
		$\Phi\text{D} \times \text{L}$	Z	RC	$\Phi\text{D} \times \text{L}$	Z	RC	$\Phi\text{D} \times \text{L}$	Z	RC
1							4×5.4	3.5	60	
2.2							4×5.4	3.5	60	
3.3							4×5.4	3.5	60	
4.7		4×5.4	2.0	80	4×5.4	2.0	80	5×5.4	2.0	85
10		4×5.4	2.0	80	5×5.4	1.0	150	6.3×5.4	1.2	165
22		5×5.4	1.0	150	6.3×5.4	0.50	230	6.3×7.7	0.80	185
33		6.3×5.4	0.50	230	6.3×7.7	0.36	280	6.3×7.7	0.80	185
47		6.3×5.4	0.50	230	6.3×7.7	0.36	280	6.3×7.7	0.80	185
100		6.3×7.7	0.36	280	6.3×7.7	0.36	280	8×10.2	0.36	350
					8×10.2	0.17	450	10×10.2	0.20	550
150		8×10.2	0.17	450	8×10.2	0.17	450	10×10.2	0.20	550
220		8×10.2	0.17	450	10×10.2	0.10	670	10×10.2	0.20	550
330		8×10.2	0.17	450	10×10.2	0.10	670			
		10×10.2	0.10	670						
470		10×10.2	0.10	670						

### ◆ RIPPLE CURRENT MULTIPLIERS

#### Frequency Multipliers

Vdc	Frequency (Hz)				
	50Hz	120Hz	300Hz	1KHz	$\geq 10\text{KHz}$
6.3 ~ 50	0.60	0.70	0.75	0.85	1.00