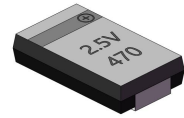


Surface Mount Type

RV series (125°C High Temperature Resistant)



Features

- High Voltage (25V, max)
- High Temperature Resistant (125°C)
- Excellent Ripple Absorption (7500mA, max)
- RoHS & REACH Compliance, Halogen free

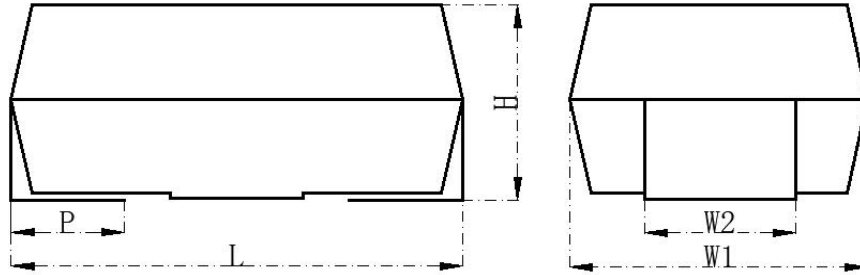
Main Applications

- New Energy Vehicles
- Artificial Intelligence
- Server
- 5G Base Station

Specifications

series	RV	
Operating Temp. Range	-55°C~125°C	
Rated Voltage Range	2V~25V	
Rated Capacitance Range	15μF~470μF	
DC Leakage Current (LC)	2V~6.3V: ≤0.1CV, 10V~25V: ≤0.3CV (Rated Voltage, 2minutes)	
Capacitance Tolerance	K(-10%~+10%), M(-20%~+20%), Y(-35%~+10%) or customized	
Dissipation Factor (tgδ)	≤ 0.1 (Frequency: 120Hz, Temp.:20°C)	
Surge Voltage (V)	2V~16V:1.25*VR, 20V~25V:1.15*VR (15°C~35°C)	
Endurance	Temp.: 125 ±3°C	Appearance: No macroscopi damage
	Applied Voltage: Rated Voltage(DC)	Capacitance Change: -20%~+20% of initial value
	Test time: 1000h	Dissipation Factor (tgδ): ≤0.2
	Stabilizing time: 1~2h	Leakage Current: ≤specified value
Damp heat, Steady state	Temp.: 60 ±2°C	Appearance: No macroscopi damage
	Humidity: 90 ⁺² ₋₃ %RH	Capacitance Change: -20%~+60% of initial value (4V~25V), -20%~+70% of initial value (2V~2.5V)
	No load, Test time: 500h	Dissipation Factor (tgδ): ≤0.2
	Stabilizing time: 1~2h	Leakage Current: ≤300% of specified value

Product Size



Series	L (mm)±0.4	W1 (mm)±0.3	H (mm)±0.2	P (mm)±0.2	W2 (mm)±0.1
RV	7.3	4.3	1.9	1.3	2.4

Characteristics List

Product Part No.	Rated Voltage (V)	Capacitance (μF) *1	D.F. *2	ESR (mΩ) *3	R.C. (mA) *4	L.C. (μA) *5
RV0D471MR015A0	2	470	0.06	15	5100	94
RV0D471MR009A0			0.06	9	6300	94
RV0D471MR006A0			0.06	6	7500	94
RV0E331MR015A0	2.5	330	0.06	15	5100	82.5
RV0E331MR009A0			0.06	9	6300	82.5
RV0E331MR006A0			0.06	6	7500	82.5
RV0E331MR4R5A0			0.06	4.5	8500	82.5
RV1A470MR040A0	10	47	0.06	40	3200	141
RV1A680MR040A0		68	0.06	40	3200	204
RV1A101MR040A0		100	0.06	40	3200	300
RV1C150MR040A0	16	15	0.06	40	3200	72
RV1C220MR040A0		22	0.06	40	3200	105.6
RV1C330MR040A0		33	0.06	40	3200	158.4
RV1C470MR040A0		47	0.06	40	3200	225.6
RV1C680MR040A0		68	0.06	40	3200	326.4
RV1D220MR040A0	20	22	0.06	40	3200	132
RV1D330MR040A0		33	0.06	40	3200	198
RV1D470MR040A0		47	0.06	40	3200	282
RV1D560MR040A0		56	0.06	40	3200	336
RV1E150MR040A0	25	15	0.06	40	3200	112.5
RV1E220MR040A0		22	0.06	40	3200	165
RV1E330MR040A0		33	0.06	40	3200	247.5

Note:

*1: 120Hz, +20±1°C

*2: 120Hz, +20±1°C

*3: 100KHz, +20±1°C

*4: 100KHz, +45±1°C

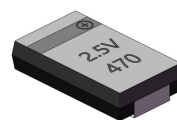
*5: Rated Voltage, 2 minutes

Temperature Coefficient for Ripple Current

Products	T≤45°C	45°C<T≤85°C	85°C<T≤105°C	85°C<T≤125°C
2 V~6.3 V	1.0	0.7	0.25	0.25
10 V~25 V	1.0	0.8	0.5	0.25

表面贴装型

125°C耐高温系列



产品特点

- 高电压 (25V, max)
- 耐高温 (125°C)
- 耐纹波电流能力好 (7500mA, max)
- 环保 (符合无卤、RoHS和REACH规定)

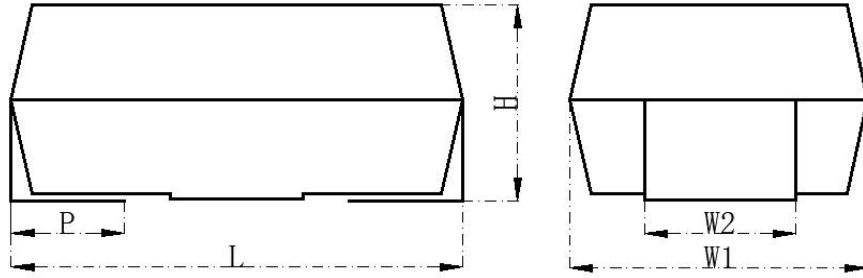
产品应用

- 新能源汽车
- 人工智能
- 服务器
- 5G基站

产品规格

系列	RV	
类别温度	-55°C~125°C	
额定电压	2V~25V	
静电容量范围 (120Hz, 20°C)	15μF~470μF	
漏电流 (LC)	2V~6.3V: ≤0.1CV, 10V~25V: ≤0.3CV (额定电压, 2分钟)	
静电容量容差	K档(-10%~+10%), M档(-20%~+20%), Y档(-35%~+10%) 或定制其他档位	
损耗角正切 (tgδ)	≤ 0.1(频率: 120Hz, 温度: 20°C)	
浪涌电压 (V)	2V~16V: 1.25*VR, 20V~25V: 1.15*VR (15°C~35°C)	
耐久性	温度: 125 ±3°C	外观: 无明显损伤
	施加电压: 额定电压(DC)	容量变化: 初始值的-20%~+20%
	测试时间: 1000h	损耗角正切 (tgδ): ≤0.2
	恢复时间: 1~2h	漏电流: ≤规定值
高温高湿	温度: 60 ±2°C	外观: 无明显损伤
	湿度: 90 ⁺² ₋₃ %RH	容量变化: 初始值的-20%~+70% (2V~2.5V), 初始值的-20%~+60% (4V~25V)
	空载, 测试时间: 500h	损耗角正切(tgδ): ≤0.2
	恢复时间: 1~2h	漏电流: ≤规定值的300%

产品尺寸



系列	L (mm)±0.4	W1 (mm)±0.3	H (mm)±0.2	P (mm)±0.2	W2 (mm)±0.1
RV	7.3	4.3	1.9	1.3	2.4

特性一览表

产品编号	额定电压 (V)	容量 (μF) *1	损耗 *2	ESR (mΩ) *3	纹波电流 (mA) *4	漏电流 (μA) *5
RV0D471MR015A0	2	470	0.06	15	5100	94
RV0D471MR009A0			0.06	9	6300	94
RV0D471MR006A0			0.06	6	7500	94
RV0E331MR015A0	2.5	330	0.06	15	5100	82.5
RV0E331MR009A0			0.06	9	6300	82.5
RV0E331MR006A0			0.06	6	7500	82.5
RV0E331MR4R5A0			0.06	4.5	8500	82.5
RV1A470MR040A0	10	47	0.06	40	3200	141
RV1A680MR040A0		68	0.06	40	3200	204
RV1A101MR040A0		100	0.06	40	3200	300
RV1C150MR040A0	16	15	0.06	40	3200	72
RV1C220MR040A0		22	0.06	40	3200	105.6
RV1C330MR040A0		33	0.06	40	3200	158.4
RV1C470MR040A0		47	0.06	40	3200	225.6
RV1C680MR040A0		68	0.06	40	3200	326.4
RV1D220MR040A0		20	22	0.06	40	3200
RV1D330MR040A0	33		0.06	40	3200	198
RV1D470MR040A0	47		0.06	40	3200	282
RV1D560MR040A0	56		0.06	40	3200	336
RV1E150MR040A0	25	15	0.06	40	3200	112.5
RV1E220MR040A0		22	0.06	40	3200	165
RV1E330MR040A0		33	0.06	40	3200	247.5

备注:

- *1: 120Hz, +20±1°C
- *2: 120Hz, +20±1°C
- *3: 100KHz, +20±1°C
- *4: 100KHz, +45±1°C
- *5: 额定电压, 2分钟

纹波电流温度系数

产品	T≤45°C	45°C<T≤85°C	85°C<T≤105°C	85°C<T≤125°C
2.0 V~6.3 V	1.0	0.7	0.25	0.25
10 V~25 V	1.0	0.8	0.5	0.25