

RVT-VT Series

WIDE TEMPERATURE 宽温品

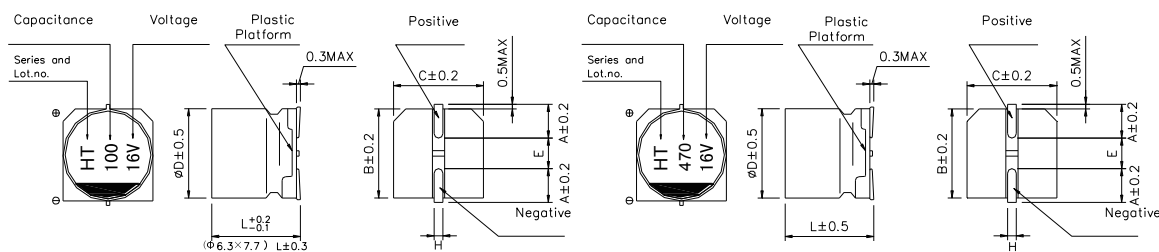
- Operating with wide temperature range -55~+105 °C
适用于 -55~+105 °C 的宽温范围
- Load life of 2000 hours
负荷寿命 2000小时
- Comply with the RoHS directive
符合RoHS指令



■ 主要技术性能 Specification

项目 Item	特性 Performance Characteristics										
使用温度范围 Operating temperature range	-55 ~ +105 °C										
额定电压范围 Rated voltage range	4 ~ 100V										
标称电容量范围 Nominal capacitance range	0.1 ~ 6800μF										
标称电容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20°C)										
漏电流 Leakage current	I ≤ 0.01CV 或 3(μA) 2分钟 取较大者 (at 20°C, after 2 minutes) (whichever is greater)					I ≤ 0.02CV +15 (μA) 1分钟 (1 minute)					
损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz)	U _R (V)		4	6.3	10	16	25	35	50	63	100
	tg δ	Ø4~Ø10	0.35	0.26	0.20	0.16	0.14	0.12	0.12	0.12	0.12
		Ø12.5~Ø16	0.42	0.38	0.34	0.30	0.26	0.22	0.18	0.14	0.12
温度特性Temperature characteristics (Impedance ratio at 120Hz)			4	6.3	10	16	25	35	50~63	100	
	Ø4~Ø10	Z(-25°C) / Z(20°C)	7	4	3	2	2	2	2	3	
		Z(-40°C) / Z(20°C)	15	8	6	4	4	3	3	4	
	Ø12.5~Ø16	Z(-25°C) / Z(20°C)	7	5	4	3	2	2	2	2	
		Z(-40°C) / Z(20°C)	17	12	10	8	5	4	3	3	
耐久性 Load life	After 2000 hrs. (1000 hrs. for Ø4~Ø6.3×5.4) application of the rated voltage at 105°C, they meet the characteristics listed below. 在105℃环境中施加额定工作电压2000小时 (Ø4~Ø6.3×5.4 为1000小时)后, 电容器的特性符合下表的要求。 电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏 电 流 Leakage current : ≤初始规定值 ≤the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2times of the initial specified value										
高温贮存 Shelf life	+105℃,1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then resumed for 16 hours: 电容量变化率 Capacitance change : ±10%初始测量值以内 10% of the initial measured value 漏 电 流 Leakage current : ≤2倍初始规定值 ≤2times of the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2times of the initial specified value										

■ 外形图及尺寸图 Case size table



- | | |
|-----------------------------------|-----------------|
| *1. Voltage mark for 6.3V is [6V] | 6.3V的產品標識為 [6V] |
| *2. Applicable to Ø6.3×7.7 | 適用於Ø6.3×7.7 |
| *3. Applicable to Ø8×10.5~Ø10 | 適用於Ø8×10.5~Ø10 |
| *4. Applicable to Ø12.5~Ø16 | 適用於Ø12.5~Ø16 |

RVT-VT Series

ØD × L	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8 × 6.2	8 × 10.5	10 × 10.5	10 × 13.5	12.5 × 13.5	12.5 × 16	16 × 16.5
A	1.8	2.1	2.4	2.4	3.3	2.9	3.2	3.2	4.7	4.7	5.5
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	13.0	13.0	17.0
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	13.0	13.0	17.0
E ± 0.2	1.0	1.3	2.2	2.2	2.2	3.1	4.4	4.4	4.4	4.4	6.7
L	5.4	5.4	5.4	7.7	6.2	10.5	10.5	13.5	13.5	16.0	16.5

■ 尺寸 Dimensions

μF	WV Code 代码	4		6.3		10		16		25	
		0G		0J		1A		1C		1E	
4.7	4R7									4 × 5.4	13
10	100							4 × 5.4	18	(4 × 5.4) 5 × 5.4	(14) 20
22	220			4 × 5.4	22	(4 × 5.4) 5 × 5.4	(20) 25	(4 × 5.4) 5 × 5.4	(20) 27	(5 × 5.4) 6.3 × 5.4	(25) 36
33	330	(4 × 5.4) 5 × 5.4	(18) 30	(4 × 5.4) 5 × 5.4	(22) 27	(4 × 5.4) 5 × 5.4	(22) 30	(5 × 5.4) 6.3 × 5.4	(28) 40	(5 × 5.4) 6.3 × 5.4	(29) 44
47	470	(4 × 5.4) 5 × 5.4	(24) 36	(4 × 5.4) 5 × 5.4	(25) 33	(5 × 5.4) 6.3 × 5.4	(30) 41	(5 × 5.4) 6.3 × 5.4	(31) 48	6.3 × 5.4 (8 × 6.2)	48 (91)
100	101	(5 × 5.4) 6.3 × 5.4	(43) 60	(5 × 5.4) 6.3 × 5.4	(39) 50	(5 × 5.4) 6.3 × 5.4	(52) 53	6.3 × 5.4 (8 × 6.2)	60 (120)	6.3 × 7.7	91
150	151	6.3 × 5.4	52	6.3 × 5.4	55	6.3 × 5.4	62	6.3 × 7.7	95	(6.3 × 7.7) 8 × 10.5	(100) 140
220	221	6.3 × 5.4	57	(6.3 × 5.4) 6.3 × 7.7	(67) 105	(6.3 × 5.4) 6.3 × 7.7	(103) 105	(6.3 × 7.7) (8 × 6.2) 8 × 10.5	(105) (85) 150	8 × 10.5	175
330	331	6.3 × 7.7	100	6.3 × 7.7	105	8 × 10.5	196	8 × 10.5	195	(8 × 10.5) 10 × 10.5	(220) 240
470	471	6.3 × 7.7	105	(6.3 × 7.7) 8 × 10.5	(120) 210	(8 × 10.5) 10 × 10.5	(210) 260	(8 × 10.5) 10 × 10.5	295 (230)	10 × 10.5	280
680	681	8 × 10.5	210	8 × 10.5	210	10 × 10.5	270	10 × 10.5	315	10 × 13.5	400
1000	102	8 × 10.5	230	(8 × 10.5) 10 × 10.5	(230) 300	10 × 10.5	315	(10 × 10.5) (10 × 13.5) 12.5 × 13.5	(340) (390) 500	12.5 × 13.5	580
1500	152	10 × 10.5	315	(10 × 10.5) 10 × 13.5	(315) 450	10 × 13.5	460	12.5 × 13.5	550	12.5 × 16	850
2200	222	(10 × 10.5) 10 × 13.5	(340) 440	(10 × 13.5) 12.5 × 13.5	(500) 620	12.5 × 13.5	680	(12.5 × 16) 16 × 16.5	(750) 950	16 × 16.5	1050
3300	332	10 × 13.5	490	(12.5 × 13.5) 12.5 × 16	(660) 700	16 × 16.5	1000	16 × 16.5	1000		
4700	472	12.5 × 13.5	600	16 × 16.5	1000					Case size 尺寸	Ripple current 纹波电流
6800	682	(12.5 × 16) 16 × 16.5	950 (650)								

μF	WV Code 代码	35		50		63		100	
		1V		1H		1J		2A	
0.1	0R1			4 × 5.4	0.7	4 × 5.4	0.7		
0.22	R22			4 × 5.4	1.6	4 × 5.4	1.6		
0.33	R33			4 × 5.4	2.5	4 × 5.4	2.5		
0.47	R47			4 × 5.4	3.5	4 × 5.4	3.5		
1	010			4 × 5.4	7	4 × 5.4	7	4 × 5.4	7
2.2	2R2			4 × 5.4	11	4 × 5.4	11	6.3 × 5.4	14
3.3	3R3	4 × 5.4	13	4 × 5.4	13	5 × 5.4	13	(6.3 × 5.4) 6.3 × 7.7 (8 × 6.2)	(20) 32 (30)
4.7	4R7	4 × 5.4	14	(4 × 5.4) 5 × 5.4	(13) 16	5 × 5.4	16	6.3 × 5.4 6.3 × 7.7	(21) 35
10	100	(4 × 5.4) 5 × 5.4	(14) 21	6.3 × 5.4	24	(6.3 × 5.4) 6.3 × 7.7 (8 × 6.2)	(24) 39 (25)	(6.3 × 7.7) 8 × 10.5	(35) 77
22	220	6.3 × 5.4	38	(6.3 × 5.4) 6.3 × 7.7 (8 × 6.2)	(42) 51 (70)	(6.3 × 7.7) 8 × 10.5	(49) 98	(8 × 10.5) 10 × 10.5	(84) 126
33	330	6.3 × 5.4 (8 × 6.2)	42 (84)	6.3 × 7.7	60	8 × 10.5	112	10 × 10.5	133
47	470	(6.3 × 5.4) 6.3 × 7.7	(50) 70	(6.3 × 7.7) 8 × 10.5	(63) 120	(8 × 10.5) 10 × 10.5	(119) 160	(10 × 10.5) (10 × 13.5) 12.5 × 13.5	(140) (160) 250
68	680					Case size 尺寸	Ripple current 纹波电流	(10 × 13.5) 12.5 × 13.5	(180) 300

• Case size ØD×L(mm), ripple current (mA rms) at 105°C 120Hz • 尺寸ØD×L(mm), 纹波电流(mA rms)於 105°C 120Hz

RVT-VT Series

■ 尺寸 Dimensions

μF	Code 代码	35		50		63		100	
		1V		1H		1J		2A	
100	101	(6.3 × 7.7) 8 × 10.5	(84) 120	(8 × 10.5) 10 × 10.5	(140) 170	(10 × 10.5) (10 × 13.5) 12.5 × 13.5	(196) (210) 270	(12.5 × 13.5) 16 × 16.5	(380) 450
150	151	8 × 10.5	155	10 × 10.5	170	10 × 13.5	225		
220	221	(8 × 10.5) 10 × 10.5	(190) 220	(10 × 10.5) 10 × 13.5	(220) 280	(10 × 13.5) (12.5 × 13.5) 16 × 16.5	(235) (470) 560	16 × 16.5	550
330	331	10 × 10.5	245	(10 × 13.5) (12.5 × 13.5) 16 × 16.5	(295) (420) 600	(12.5 × 16) 16 × 16.5	(510) 700		
470	471	(10 × 10.5) (10 × 13.5) 12.5 × 13.5	(280) (375) 520	(12.5 × 16) 16 × 16.5	(520) 700	16 × 16.5	750		
680	681	(10 × 13.5) 12.5 × 13.5	(395) 530	16 × 16.5	750			Case size 尺寸	Ripple current 纹波电流
1000	102	(12.5 × 16) 16 × 16.5	(600) 750						

•Case size ØD×L(mm), ripple current (mA rms) at 105°C 120Hz •尺寸ØD×L(mm) 纹波电流 (mA rms)於 105°C 120Hz

■ 纹波电流的相关参数 Multiplier For Ripple Current

Frequency 频率			50Hz	120Hz	300Hz	1KHz	10KHz-
Coefficient 系数	Φ 4-Φ 10	0. 1-68uF	0.70	1.00	1.17	1.36	1.50
		100-300uF	0.85	1.00	1.08	1.20	1.30
	Φ 12. 5-Φ 16	-68uF	0.75	1.00	1.35	1.57	2.00
		100-680uF	0.80	1.00	1.23	1.34	1.50
		1000-6800uF	0.85	1.00	1.10	1.13	1.15

V-Chip