

# VT

## 特点 Features

- 保证105°C 2000小时:Endurance 2000h at 105°C.
- 额定电压范围：6.3~450V。Rated Voltage Range:6.3~450V.
- 标准品。Standard Type.
- 满足RoHS。RoHS Compliant.

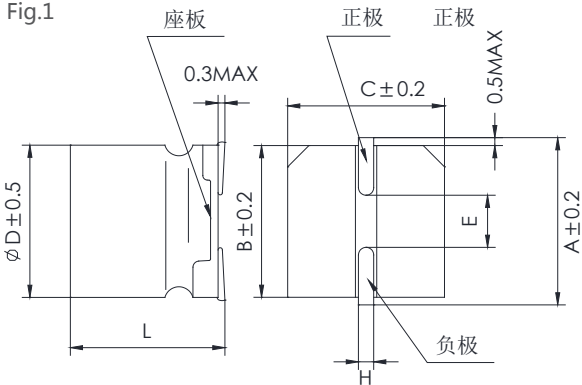


## 主要技术性能 Specifications

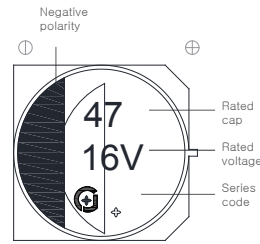
项目 Items	特性 Performance Characteristics													
类别温度范围 Category Temperature Range	-55°C ~+105°C(6.3-100V),-40°C ~+105°C(160-450V)													
额定电压范围 Rated Voltage(U <sub>R</sub> )	6.3 ~ 450V													
标称容量范围 Nominal Capacitance Range(C <sub>R</sub> )	1 ~ 8200μF											120Hz, +20°C		
标称容量允许偏差 Allowed Capacitance Tolerance(C <sub>T</sub> )	±20%(M)											120Hz, +20°C		
漏电流 Leakage Current(I <sub>L</sub> )	6.3-100V						160-450V						+20°C after 2 minutes	
	≤0.01C <sub>R</sub> U <sub>R</sub> 或者3μA 取较大值 ( Whichever is greater )						≤0.04 C <sub>R</sub> V <sub>R</sub> +100μA							
损耗角正切值 Tangent of loss angle(Tanδ)	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	80	100	160-250	350-450	Max. 120Hz, +20°C	
	Tanδ	0.32	0.24	0.20	0.16	0.14	0.12	0.12	0.11	0.10	0.15	0.20		
低温特性 Characteristics at Low Temperature	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	80	100	160-250	350-450	Max. 120Hz	
	Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	4	4	3	2	2	2	2	3	3	3	6		
	Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	-	-	-	-	-	-	-	-	-	-	6		10
	Z <sub>-55°C</sub> / Z <sub>+20°C</sub>	12	8	6	4	3	3	3	3	3	-	-		
耐久性 Load Life	+105°C, 连续施加额定电压2000小时, 恢复16小时后: After applying rated voltage for 2000 hours at 105°C and then recovery 16 hours:													
	容量变化率 Capacitance change	±30%初始值以内(160-450V为±20%) Within ±30% of initial value ( ±20% of 160-450V )												
	损耗角正切值 Tanδ	≤ 300%初始规定值(160-450V为≤200%) Not more than 300% of specified value (≤200% of 160-450V)												
	漏电流 Leakage current	≤ 初始规定值 Not more than specified value												
高温贮存 Shelf Life	+105°C,1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then recovery 16 hours:													
	容量变化率 Capacitance change	±30%初始值以内(160-450V为±20%) Within ±30% of initial value ( ±20% of 160-450V )												
	损耗角正切值 Tanδ	≤ 300%初始规定值(160-450V为≤200%) Not more than 300% of specified value (≤200% of 160-450V)												
	漏电流 Leakage current	≤ 初始规定值 Not more than specified value												
耐焊接热 Resistance to Soldering Heat	在250°C的条件下, 电容器在热板上保持30秒, 然后从热板上取出电容器, 让其在室温下恢复, 电容器应满足以下要求: The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement.													
	容量变化率 Capacitance change	±10%初始值以内 Within ±10% of initial value												
	损耗角正切值 Tanδ	≤初始规定值 Not more than specified value												
	漏电流 Leakage current	≤ 初始规定值 Not more than specified value												

尺寸图 Dimensional drawings

Fig.1



Marking  
ΦD=4~5mm



ΦD=6.3~10.2mm

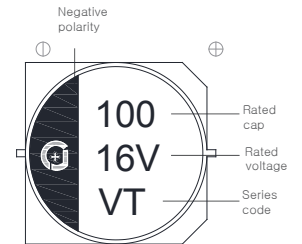
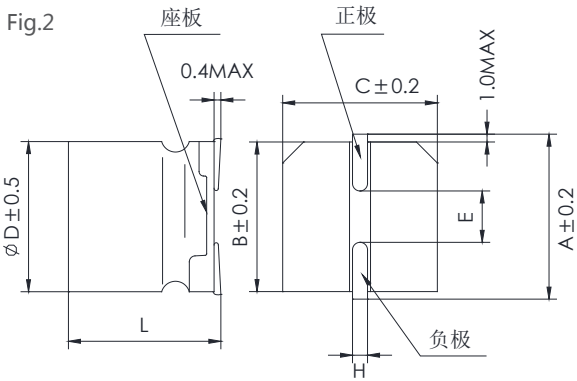
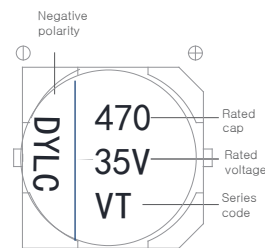


Fig.2



ΦD=12.5~18mm



尺寸表 Size table

单位 Unit: mm

ΦD	L	A	B	C	E±0.2	H	Fig.No.
4	5.4 <sup>+0.2</sup> <sub>-0.1</sub>	5.0	4.3	4.3	1.0	0.5~0.8	1
4	5.8±0.3	5.0	4.3	4.3	1.0		
5	5.4 <sup>+0.2</sup> <sub>-0.1</sub>	6.0	5.3	5.3	1.3		
5	5.8±0.3	6.0	5.3	5.3	1.3		
6.3	5.4 <sup>+0.2</sup> <sub>-0.1</sub>	7.3	6.6	6.6	2.2		
6.3	5.8±0.3	7.3	6.6	6.6	2.2		
6.3	7.7±0.3	7.3	6.6	6.6	2.2		
8	6.5±0.5	8.9	8.3	8.3	2.3		
8	10/10.5±0.5	9.0	8.3	8.3	3.1	0.8~1.1	
10	10/10.5±0.5	11.0	10.3	10.3	4.5		
10	12.5±1	11.0	10.3	10.3	4.5		
12.5	13.5±0.5	13.6	13	13	4.5	1.1~1.4	2
12.5	16±0.5	13.6	13	13	4.5		
16	16.5±0.5	18.0	17	17	6.4		
16	21.5±0.5	18.0	17	17	6.4		
18	16.5±0.5	20.0	19	19	6.4		
18	21.5±0.5	20.0	19	19	6.4		

## 规格特性表

## Table of specifications and characteristics

U <sub>R</sub> (V) C <sub>R</sub> (μF)	6.3V		10V		16V		25V		35V	
	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA
4.7									4*5.4	16
10			4*5.4	20	4*5.4	18	4*5.4	13	5*5.4	27
22	4*5.4	22	5*5.4	27	5*5.4	30	5*5.4	23	6.3*5.4	44
33	4*5.4	26	5*5.4	35	5*5.4	32			6.3*5.4	48
47	5*5.4	36	5*5.4	34	6.3*5.4	50	6.3*5.4	48	6.3*7.7	80
100	6.3*5.4	60	6.3*5.4	60	6.3*5.4	60	6.3*7.7	86	8*10.5	240
220	6.3*5.8	90	6.3*5.8	75	6.3*7.7	100	8*10.5	240	10*10.5	430
330	6.3*7.7	105	6.3*7.7	100	8*10.5	290	10*10.5	410	10*10.5	450
470	8*10.5	340	8*10.5	320	8*10.5	320	10*10.5	450	10*12.5	510
680			10*10.5	395	10*10.5	470	10*12.5	550	12.5*13.5	530
1000	10*10.5	495	10*10.5	450	12.5*13.5	560	12.5*13.5	560	12.5*16	820
2200	12.5*13.5	690	12.5*13.5	690	16*16.5	910	16*16.5	910	18*21.5	1080
3300	12.5*16	860	16*16.5	960	16*16.5	960	18*16.5	1200		
4700	16*16.5	1050	16*16.5	1030	18*16.5	1250	18*21.5	1340		
6800	18*16.5	1300	18*16.5	1290						
8200	18*21.5	1500	18*21.5	1480						

U <sub>R</sub> (V) C <sub>R</sub> (μF)	50V		63V		80V		100V	
	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA
1	4*5.4	6.3						
2.2	4*5.4	11						
3.3	4*5.4	14						
4.7	5*5.4	19						
10	6.3*5.4	36	6.3*5.4	26	6.3*7.7	35	6.3*7.7	24
22	6.3*5.4	32	6.3*7.7	48	8*10.5	90	8*10.5	100
33	6.3*7.7	60			10*10.5	100	10*10.5	150
47	8*10.5	230	8*10.5	150	10*10.5	150	10*12.5	180
100	8*10.5	230	10*10.5	310	10*12.5	180	12.5*13.5	390
220	10*10.5	375	12.5*13.5	480	16*16.5	470	16*16.5	450
330	12.5*13.5	500	16*16.5	660	18*16.5	600	18*16.5	590
470	12.5*16	580	16*16.5	700	18*21.5	1000	18*21.5	980
1000	18*16.5	1000						

U <sub>R</sub> (V) C <sub>R</sub> (μF)	160V		200V		250V		400V		450V	
	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 105°C mA
2.2					8*10.5	30	8*10.5	29		
3.3					8*10.5	36	8*10.5	30		
4.7					8*10.5	42	8*12.5	40	10*12.5	40
5.6							10*12.5	51		
6.8					8*10.5	64	10*12.5	52		
8.2					10*10.5	70	10*12.5	55		
10	8*10.5	57	10*10.5	75	10*10.5	72	12.5*13.5	75	12.5*13.5	70
15	8*12.5	65	10*12.5	81						
22	10*12.5	80	12.5*13.5	220	12.5*13.5	150				
33	12.5*13.5	180								

额定纹波电流频率修正系数  
Frequency correction factor for ripple current

( 6.3~100V )

Frequency ( Hz )	50	120	300	1K	≥10K
Coefficient ( kf )	0.70	1.00	1.17	1.36	1.50

( 160~450V )

Frequency ( Hz )	50	120	300	1K	≥10K
Coefficient ( kf )	0.80	1.00	1.25	1.40	1.60