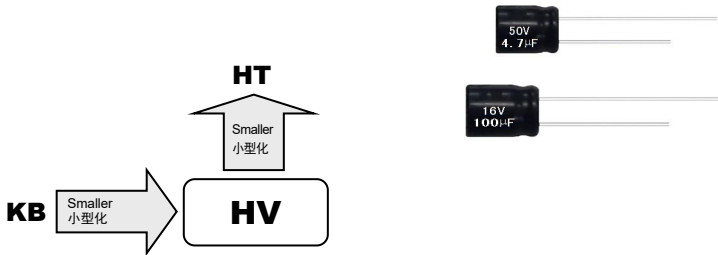


WIDE TEMPERATURE RANGE, HEIGHT 7(9)MM

7(9)MM 高，宽温品

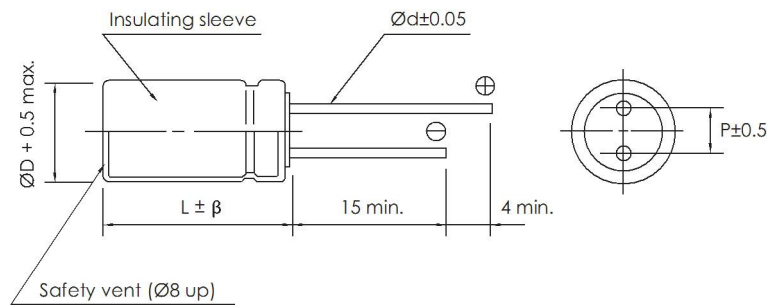
- Super miniature series with 7(9)mm height
7(9)mm 高，超小型系列
- High performance and excellent temperature characteristics
高性能和卓越的温度特性
- Load life of 1000 hours at 105°C
在 105°C 环境中负荷寿命 1000 小时
- Comply with the RoHS directive
符合 RoHS 指令



SPECIFICATIONS 特性表

Items 项目	Characteristics 主要特性							
Operation Temperature Range 使用温度范围	-40 ~ +105°C							
Voltage Range 额定工作电压范围	4 ~ 63V							
Capacitance Range 静电容量范围	0.1 ~ 1000μF							
Capacitance Tolerance 静电容量允许偏差	±20% at 120Hz, 20°C							
Leakage Current 漏电流	Leakage current = 0.01CV or 3μA, whichever is greater (after 2 minutes application of rated voltage) 漏电流 = 0.01CV 或 3μA，取较大值（施加额定工作电压 2 分钟后）							
Dissipation Factor (tan δ) 损耗角正切	When nominal capacitance is over 1000μF, tan δ shall be added 0.02 to the listed value with increase of every 1000μF. 当标称静电容量大于 1000μF，其标称静电容量每增加 1000μF，损耗角正切增加 0.02。 Measurement frequency 测试频率: 120Hz, Temperature 温度: 20°C							
	Rated Voltage (V) 额定工作电压	4	6.3	10	16	25	35	50, 63
	tan δ (max.) 最大损耗角正切	0.35	0.24	0.20	0.16	0.14	0.12	0.10
Stability at Low Temperature 低温特性	Measurement frequency 测试频率: 120Hz							
	Rated Voltage (V) 额定工作电压	4	6.3	10	16	25, 35	50, 63	
	Impedance Ratio 阻抗比	Z(-25°C) / Z(20°C)	6	4	3	2	2	2
		Z(-40°C) / Z(20°C)	12	10	8	6	4	3
Load Life 高温负荷特性	After 1000 hours application of the rated voltage at 105°C, they meet the characteristics listed below. 在 105°C 环境中施加额定工作电压 1000 小时后，电容器的特性符合下表的要求。							
	Capacitance Change 静电容量变化率	Within ±20% of initial measured value 初始值的±20%以内						
	Dissipation Factor 损耗角正切	≤200% of initial specified value 不大于规范值的 200%						
	Leakage Current 漏电流	≤initial specified value 不大于规范值						
Shelf Life 高温贮存特性	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for load life characteristics listed above. 在 105°C 环境中无负荷放置 1000 小时后，电容器的特性符合高温负荷特性中所列的规定值。							
Marking 标识	Printed with white colour on black sleeve (PET) or printed with white colour on green sleeve (PVC). 黑色胶管白字印刷（PET）或绿色胶管白字印刷（PVC）。							

DRAWING (Unit: mm) 外形图



ØD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
Ød	0.45			0.50
β	1.0			

Note: All design and specifications are for reference only and is subject to change without prior notice. If any doubt about safety for your application, please contact us immediately for technical assistance before purchase.

注：以上所提供的设计及特性参数仅供参考，任何修改不作预先通知。如果在使用上有疑问，请在采购前与我们联系，以便提供技术上的协助。



DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

规格尺寸及最大允许纹波电流

μF	WV Code 代码	4		6.3		10		16		25		35		50		63	
		0G		0J		1A		1C		1E		1V		1H		1J	
0.1	0R1													4 x 7	1	4 x 7	2.4
0.22	R22													4 x 7	2.3	4 x 7	3.2
0.33	R33													4 x 7	3.5	4 x 7	4
0.47	R47													4 x 7	5	4 x 7	6
0.68	R68													4 x 7	10	4 x 7	11
1	010													4 x 7	16	4 x 7	18
2.2	2R2													4 x 7	24	4 x 7	26
3.3	3R3													4 x 7	29	4 x 7	30
4.7	4R7													4 x 7	32	5 x 7	33
6.8	6R8											4 x 7	28	4 x 7	34	5 x 7	35
10	100							4 x 7	28	4 x 7	28	4 x 7	32	4 x 7 (5 x 7)	34 (44)	6.3 x 7	45
22	220					4 x 7	36	4 x 7	45	4 x 7 (5 x 7)	48 (50)	5 x 7	53	6.3 x 7	65	6.3 x 7	68
33	330					4 x 7	45	4 x 7	48	5 x 7	52	5 x 7	67	6.3 x 7	100	8 x 7	110
47	470			4 x 7	45	4 x 7	48	4 x 7 (5 x 7)	70 (80)	5 x 7 (6.3 x 7)	80 (85)	6.3 x 7	90	8 x 7	140		
68	680			4 x 7	45	5 x 7	80	5 x 7	85	6.3 x 7	105	6.3 x 7	120				
100	101	4 x 7	28	4 x 7 (5 x 7)	55 (85)	5 x 7	90	5 x 7 (6.3 x 7)	105 (125)	6.3 x 7 (8 x 7) (8 x 9)	125 (135) (170)	8 x 7	165				
220	221	5 x 7	65	6.3 x 7	110	6.3 x 7	125	6.3 x 7 (8 x 7) (8 x 9)	138 (145) (168)	8 x 9	179						
330	331	6.3 x 7	120	6.3 x 7	130	8 x 7 (8 x 9)	150 (170)	8 x 7	182								
470	471	6.3 x 7	150	6.3 x 7 (8 x 7) (8 x 9)	140 (160) (180)	8 x 9	190	8 x 9	200							Case size 尺寸	Ripple current 纹波电流
1000	102	8 x 9	215														

•Case size ∅D×L(mm), ripple current (mA rms) at 105°C, 120Hz

•尺寸∅D×L(mm), 纹波电流(mA rms)于 105°C, 120Hz

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