

HD

Low impedance

低阻抗品

- Low impedance, 105°C SMD.
- Applicable to SMT process.
- RoHS Compliance.
- 105°C低阻抗、SMD型产品。
- 适用于SMT制程。



### ■ Specifications 特性表

Items 项目	Characteristics 特性									
Capacitance Tolerance 静电容量误差	$\pm 20\%$ (120Hz,20°C)									
Operating Temperature Range 适用温度范围	-55 ~ +105°C									
Rated Voltage Range 额定电压范围	6.3 ~ 100VDC									
Capacitance Range 静电容量范围	1 ~ 1500μF									
Leakage Current 漏电流	$I \leq 0.01CV$ or $3(\mu A)$ , which is greater. ( After 2 minutes application of DC rated voltage, at 20°C)									
Dissipation Factor 损失角正切值 ( tan δ )	Measurement Frequency: 120Hz. Temperature: 20°C									
	Rated Voltage(V)	6.3	10	16	25	35	50	63	80	100
	tan δ(Max)	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.08	0.07
Low Temperature Stability 低温特性	Measurement Frequency: 120Hz.									
	Rated Voltage(V)	6.3	10	16	25	35	50	63	80	100
Impedance Ratio(Max) 阻抗比率 (最大值)	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	2
	Z(-55°C)/Z(20°C)	8	5	4	3	3	3	3	3	3
Load Life 负荷寿命	3000hours,with application of rated voltage at 105°C(ØD=4~6.3mm : 2000hrs)									
	Capacitance Change	Within $\pm 30\%$ of Initial Value								
	tan δ	300% or less of Initial Specified Value								
	Leakage Current	Initial Specified Value or less								
Shelf Life 放置寿命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.									
	Capacitance Change	Within $\pm 30\%$ of Initial Value								
	tan δ	300% or less of Initial Specified Value								
	Leakage Current	Initial Specified Value or less								
Resistance to Soldering Heat 焊锡耐热性	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 characteristics requirements listed at right.					Capacitance Change	Within $\pm 10\%$ of Initial Value			
		tan δ	Initial Specified Value							
		Leakage Current	Initial Specified Value or less							
Marking 标识	Black print on the case top									

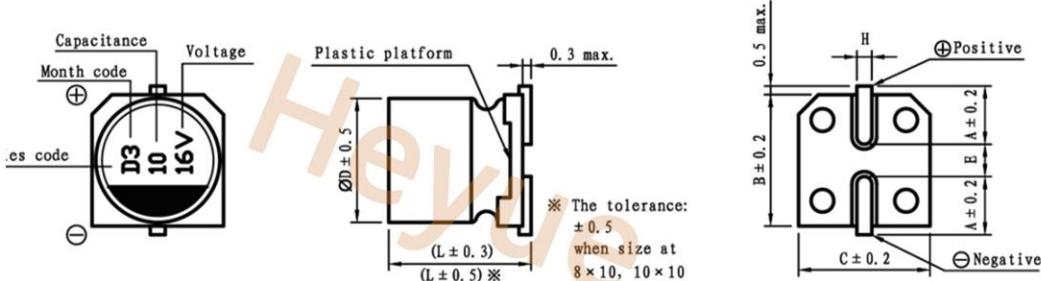
### Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	$120 \leq F < 1K$	$1K \leq F < 10K$	$10K \leq F < 100K$	$100K \leq F$
≤ 33	0.35	0.70	0.90	1.00
33 ~ 150	0.40	0.85	0.92	1.00
> 150	0.60	0.85	0.95	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

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，如有使用上任何疑问，请在采购前与我们联系，以便提供技术上的协助。

## ■ DIMENSIONS(mm) 外形图



$\phi$ DxDL	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x10	10x10	(mm)
A	1.8	2.1	2.4	2.4	2.9	3.2	
B	4.3	5.3	6.6	6.6	8.3	10.3	
C	4.3	5.3	6.6	6.6	8.3	10.3	
E	1.0	1.3	2.2	2.2	3.1	4.5	
L	5.4	5.4	5.4	7.7	10	10	
H	0.5~0.8	0.5~0.8	0.5~0.8	0.5~0.8	0.8~1.1	0.8~1.1	

## ■ Standard ratings 标准品一览表

DxL(mm); R.C.(mA rms) at 105°C 100KHz, IMP (Ω max) at 20°C 100KHz.

Cap (μF)	V	6.3			10			16			25			35			
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP									
4.7															4x5.4	80	2.0
10									4x5.4	80	2.0	4x5.4	80	2.0	5x5.4	150	1.20
22		4x5.4	80	2.0	4x5.4	80	2.0	5x5.4	150	1.20	5x5.4	150	1.20	6.3x5.4	230	0.80	
33		4x5.4	80	2.0	5x5.4	150	1.20	5x5.4	150	1.20	6.3x5.4	230	0.80	6.3x5.4	230	0.80	
47		5x5.4	150	1.20	5x5.4	150	1.20	5x5.4	150	1.20	6.3x5.4	230	0.80	6.3x5.4	230	0.80	
100		6.3x5.4	230	0.80	6.3x5.4	230	0.80	6.3x5.4	230	0.80	6.3x7.7	280	0.58	8x10	450	0.58	
150		6.3x5.4	230	0.80	6.3x5.4	230	0.80	6.3x7.7	280	0.58	8x10	450	0.22	8x10	450	0.22	
220		6.3x5.4	230	0.80	6.3x7.7	280	0.58	6.3x7.7	280	0.58	8x10	450	0.22	10x10	670	0.15	
330		8x10	450	0.22													
470		8x10	450	0.22	8x10	450	0.22	8x10	450	0.22	10x10	670	0.15				
680		8x10	450	0.22	10x10	670	0.15	10x10	670	0.15							
1000		8x10	450	0.22	10x10	670	0.15										
1500		10x10	670	0.15													

Cap (μF)	V	50			63			80			100			
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
1		4x5.4	60	9.0										
2.2		4x5.4	60	9.0										
3.3		4x5.4	60	9.0	5x5.4	85	5.0	5x5.4	50	5.3				
4.7		5x5.4	85	5.0	5x5.4	85	5.0	6.3x5.4	60	4.8				
10		6.3x5.4	165	2.2	6.3x5.4	165	2.2				8x10	130	1.88	
22		6.3x5.4	165	2.2	6.3x7.7	185	1.4	8x10	130	1.88	10x10	200	0.90	
33		6.3x7.7	185	1.4	8x10	369	0.85	10x10	200	0.90	10x10	200	0.90	
47		6.3x7.7	185	1.4	8x10	369	0.85	10x10	200	0.90	10x10	200	0.90	
68		8x10	369	0.68	10x10	450	0.48	10x10	200	0.90				
100		8x10	369	0.68	10x10	553	0.48							
150		10x10	553	0.48										

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