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Passive Elektronic

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PRODUCT SPECIFICATION

Product Type : SMD Electrolytic Capacitor Low Impedance

Product Model: TMCE27 Series

Release Date : May, 2020

Checked	Prepared
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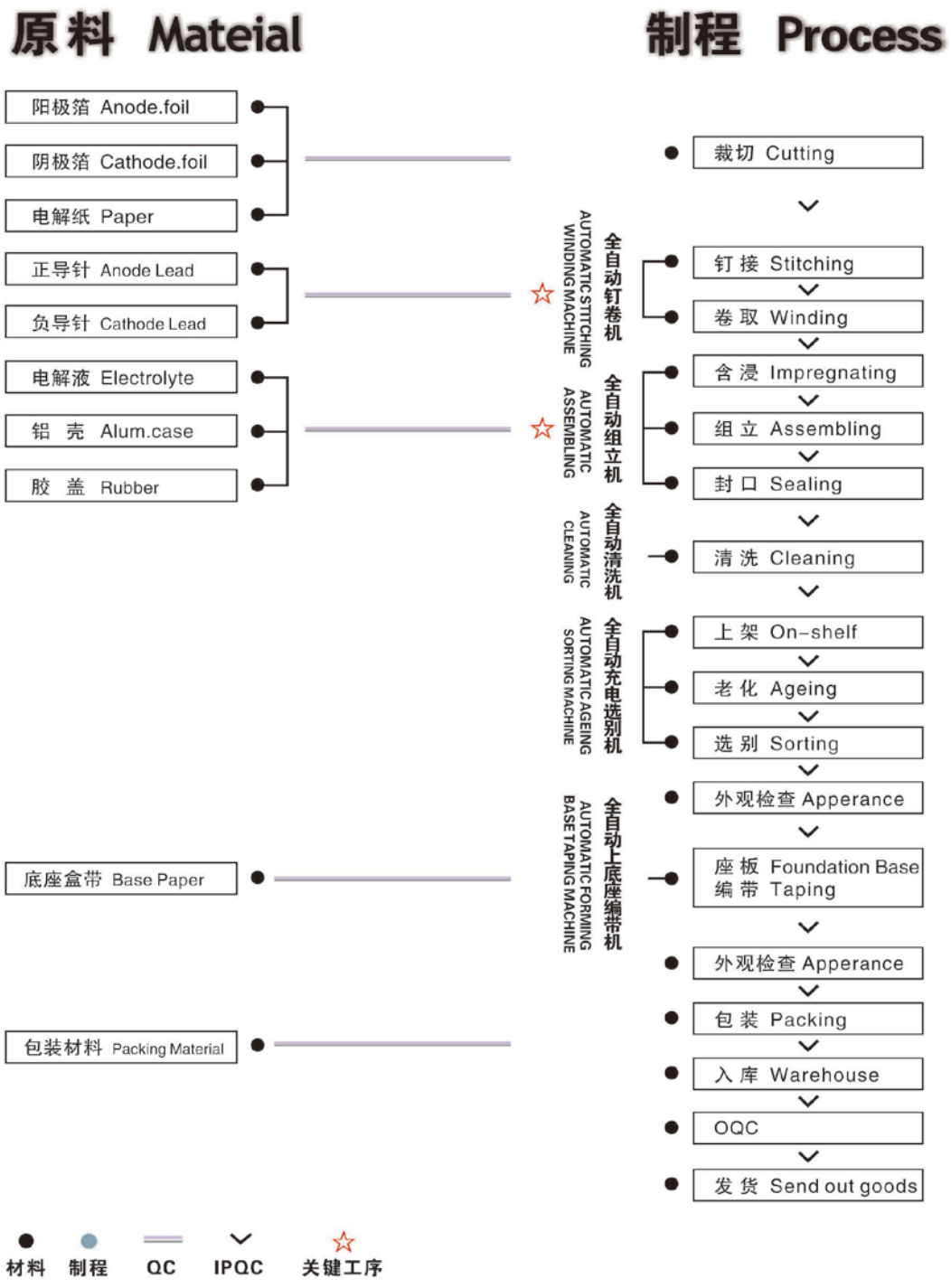
● 工艺流程 Process Flow



1. 范围： Scope

适用“TMCE27 系列”立式片式铝电解电容器

This specification covers “TMCE27 Series” Chip aluminum electrolytic capacitors low impedance.

2. 参考标准： Reference Standard

国际标准 IEC 60384 与日本工业标准 JIS C-5101

The international standard IEC 60384 and Japanese industrial standard JIS C-5101.

3. 环境保护标准： Environmental Protection Standard

遵照欧盟指令 2002/95/EC.

Comply with the EU directive 2002/95/EC.

4. 使用温度范围： Operating Temperature Range

-55℃ ~ +105℃

5. 电压范围： Voltage Range

DC: 6.3 ~ 50V

6. 容量范围： Capacitance Range

CAP: 0.1~ 1500μF

7. 容量偏差范围： Capacitance Tolerance

±20% at 120Hz, +20℃

8. 漏电流： Leakage Current

2 分钟后读数（After 2 minutes of reading）

I ≤ 0.01 CV or 3 (μA) whichever is greater

9. 损耗角： Tan δ

测试频率：120Hz，温度：20℃

Measurement frequency: 120Hz, Temperature: 20℃

Rated Voltage (V)	6.3	10	16	25	35	50
Tan δ (max.)	0.26	0.20	0.16	0.14	0.12	0.12

10. 低温特性： Stability at Low Temperature

测试频率：120Hz （Measurement frequency: 120Hz）

	Rated Voltage (V)		6.3	10	16	25	35	50
Low Temperature Stability Impedance Ratio (MAX) 120Hz	Z-25℃/Z+20℃ （120Hz）	＜Φ8	4	3	2	2	2	2
		≥Φ8	5	4	3	2	2	2
	Z-55℃/Z+20℃ （120Hz）	＜Φ8	12	8	4	4	3	3
		≥Φ8	10	8	6	4	3	3

11. 耐久性： Load Life

105℃施加额定电压 2000 小时后，放置 16 小时后，电容器应满足以下要求

After applying rated voltage with max ripple current for 2000hrs at +105℃,and then resumed 16 hours, the capacitors Shall meet the following requirements.

容量变化率 Capacitance Change	±30%初始值内 Within ±30% of initial value
损耗角正切值 Dissipation Factor	≤300%初始规定值 Not more than 300% of the specified value
漏电流 Leakage Current	≤初始规定值 Not more than the specified value

12. 高温储存： Shelf Life

105℃贮存 1000 小时后，放置 16 小时后，电容器应满足以下要求

After storage for 1000hrs at +105℃, then resumed 16 hours, the capacitors Shall meet the following requirements

容量变化率 Capacitance Change	±30%初始值内 Within ±30% of initial value
损耗角正切值 Dissipation Factor	≤300%初始规定值 Not more than 300% of the specified value
漏电流 Leakage Current	≤200%初始规定值 Not more than 300% of the specified value

13. 耐焊接热：Resistance to Soldering Heat

在 250℃的条件下，电容器在热板上保持 30 秒，然后从热板上取下电容器，让其在室温下恢复，电容器应满足以下要求：

The capacitors shall be kept on then hot plate maintained at 250℃ 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%初始值内 Within ±10% of the initial value
损耗角正切值 Dissipation Factor	≤初始规定值 Not more than the specified value
漏电流 Leakage Current	≤初始规定值 Not more than the specified value

14. 标识： Marking

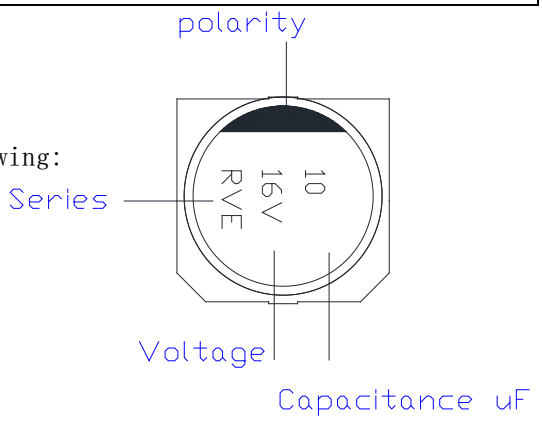
电容器标识内容如下：

Capacitors shall be legibly marked with the following:

1） 产品系列：
Manufacture’ s mark

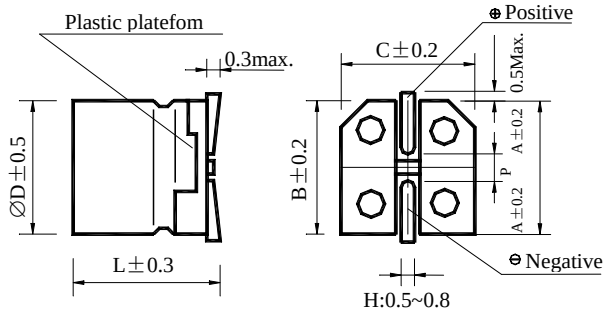
2） 额定电压和额定电容：
Rated voltage and nominal capacitance

3） 负极标识：
Negative polarity

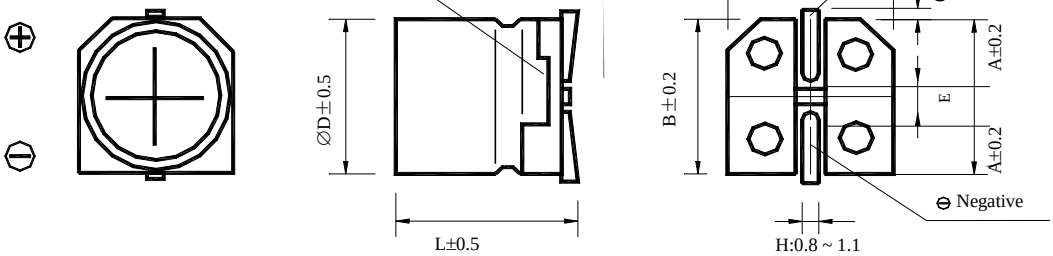


15. 图样： Drawing (Unit: mm)

(∅4~∅6.3)



(∅8, ∅10)



16. 尺寸：Dimensions (Unit: mm)

Size	Φ4×5.4	Φ5×5.4	Φ6.3×5.4	Φ6.3×7.7	Φ8×6.5	Φ8×10.2	Φ10×10.2
A	1.8	2.1	2.4	2.4	2.9	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3
P	1.0	1.3	2.2	2.2	3.1(2.2)	3.1	4.5
L	5.4	5.4	5.4	7.7	6.5	10.3	10.3
H	0.5 ~ 0.9					0.8 ~ 1.1	