



## TMCT03-LOW ESR SMD Tantalum Capacitor

### Brief Introduction

- Epoxy molded encapsulation, Chip, Easy for Integration, Heteropolarity;
  - Small in size , Light in Weight , Stable in electrical & storage performances. Long life-span. High reliability ;
- Equipment with SMT DC& Impulse Circuits
- Operative Standard: QJ/PWV109-2003;

### Application:

DC/DC converters, audio circuits, current inputs, portable electronics, telecommunications, electronics, high voltage applications, highly integrated microcircuit modules, microprocessor disintegrations and high ripple current applications.

### Technical Characteristics:

Item	Characteristic							
Operating Temperature Range	-55°C~+125°C							
Rated voltage Rang	35V <sub>DC</sub>							
Leakage Current(I <sub>0</sub> )	Measured after 5 min application of rated voltage reading, $I_0 \leq 0.01CRUR$ or 0.5μA whichever is greater. $\leq 20\mu A$ ( 25°C, 5minutes later after added rated voltage) According to the above leakage current calculation formula and product characteristics, the rated voltage of 20V is used for continuous charging for 30 seconds, and the upper limit of leakage current is 20μ A							
Ripple current (I <sub>rms</sub> )	According to the ripple current calculation formula in 14.2.2, under the condition of 25 °C / 100kHz, the capacitance can withstand the ripple current of 0.908A							
Capacitance (C <sub>R</sub> )	C <sub>R</sub> (μF)		10 ±10%			25°C±5°C 120Hz		
Dissipation Factor (tgδ)	tgδ <sub>max</sub> (%)		6					
ESR	ESR <sub>max</sub> (mΩ)		400			25°C±5°C 100kHz		
Temperature characteristics	Dissipation factor			Capacitance change			Leakage current	
	-55°C	+85°C	+125°C	-55°C	+85°C	+125°C	+85°C	+125°C
	9	9	12	-10~+10	-10~+15	-10~+20	8 I <sub>0</sub>	10 I <sub>0</sub>

**Note: 1. Ur is Rated voltage Cr is normal capacitance**

**2. Pls don't test above parameters with the universal meter**

**2. Capacitance and DF measured at: U<sub>-</sub>=2.2-1.00V, U<sub>~</sub>=1.0-0.50VV ( Voltage) Frequency : (100±5) Hz**

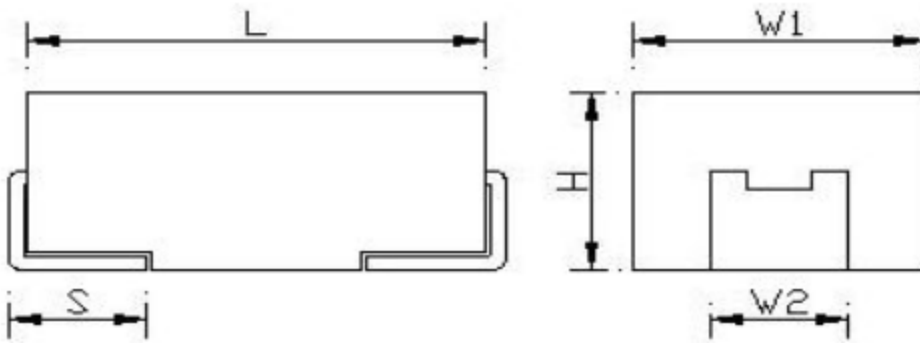
**3. Need decrease the rated voltage to use when environmental temperature is more than 85 °C (DCL measuring conditions: Applying rated voltage, the charging interval can exceed 5min.)**

# Part No: TMCT03-106K35VT D

## Part Number Naming Rule:

<b>TMCT</b>	<b>03</b>	<b>-</b>	<b>106</b>	<b>K</b>	<b>35V</b>	<b>T</b>	<b>D</b>
Product Category	Sub-Series		Capacitance	Tolerance-10%	Voltage	Package:Tape&Reel	Case Size

Dimensions and Case Size: See below Table 1& 2



图一

Outdrawing & Size(mm):

CASE Code	EIA	L	W1	H	S	W2
D	7343-43	$7.45 \pm 0.3$	$4.45 \pm 0.3$	$3 \pm 0.3$	$1.3 \pm 0.3$	$2.4 \pm 0.3$

Packing : Tape & Reel SPQ:500pcs/reel

