

# TKT

## Tantalum Capacitor – Dipped

**■ Brief Introduction:**

TKT series sinter-anode, epoxy-coated solid electrolyte tantalum capacitors are encapsulated with flame Retardant yellow epoxy powder, marked with laser. TKT Series meets and exceeds the requirements of IEC Specification 384-15-3, IECQ Specification QC300201/US003 and Technical Specification SJ/T10856-96, used In military (on request) and civil applications such as TV sets, camcorders, computers, Program-controlled electronic telephone switching systems, telephones, instruments and meters.

**■ Specifications**

OPERATING TEMPERATURE      -55°C to +125°C; >85°C with rated voltage derating.  
 RATED VOLTAGE                      See table 1  
 DC LEAKAGE AT 25°C               $I_o \leq 0.02C_R V_R$  or 1μA (Whichever is greater).  
 DISSIPATION FACTOR AT 25°C      Please See Table 3  
 CAPACITANCE RANGE                0.047μF to 680μF  
 CAPACITANCE TOLERANCE        M (±20%), K(±10%), J(±5%, for special order)  
 CASE SIZES AND DIMENSIONS      Please see Table 2  
 TEMPERATURE CHARACTERISTICS   See Table 3

**■ Rated Voltage, Nominal Capacitance and Case Sizes**

**Table 1**

Rated Voltage (V)	3	4	6.3	10	16	20	25	35	50
Voltage Derating (V)	2	2.7	4	7	10	15	17	23	33
Surge Voltage (V) +85°C	4	5	8	13	20	26	33	46	65
Capacitance					Case size				
0.047								A	A
0.068								A	A
0.1								A	A
0.15								A	A
0.22								A	A
0.33								A	A
0.47								A	A
0.68								A	A
1.0					A	A	A	A	B
1.5					A	A	A	A	C
2.2				A	A	A	A	B	C
3.3			A	A	A	B	A	B	D
4.7	A	A	A	A	B	B	B	C	D
6.8	A	A	A	B	B	C	C	D	E
10	A	A	B	B	B	C	C	D	E
15	A	A	B	C	C	D	D	E	F
22	B	B	C	C	C	D	D	E	F
33	B	B	C	D	D	E	E	F	
47	C	C	D	D	D	E	E	F	
68	D	D	D	D	E	F	F		
100	D	D	E	E	D	F	F		
150	D	E	E	E	F				
220	E	E	E	F					
330	E	F	F						
470	F								
680	F								

**■ Dimensions (unit: mm)**

**Table 2**

Case Size	D (max)	L (max)	S (±1mm)	d (±0.05mm)
A	4.5	7.0	2.54	0.5
B	5.0	8.0	2.54	0.5
C	5.5	9.5	2.54	0.5
D	6.5	11.0	2.54	0.5
E	8.5	13.0	5.08	0.5
F	9.5	16.5	5.08	0.5

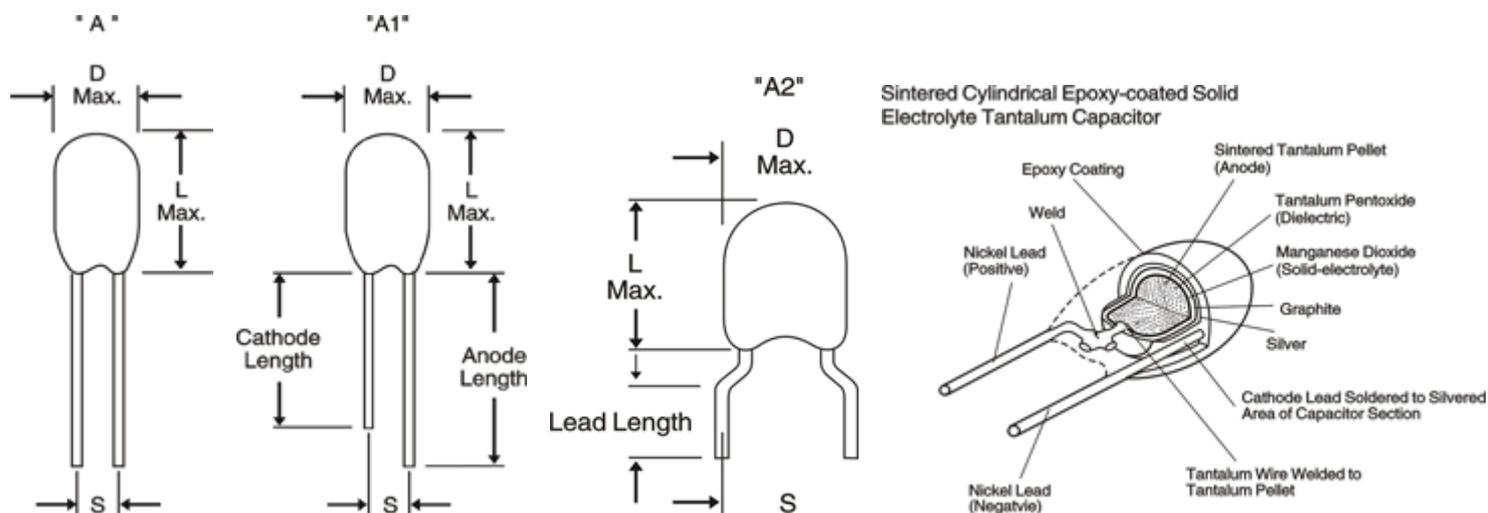
**■ Temperature Characteristics**

**Table 3**

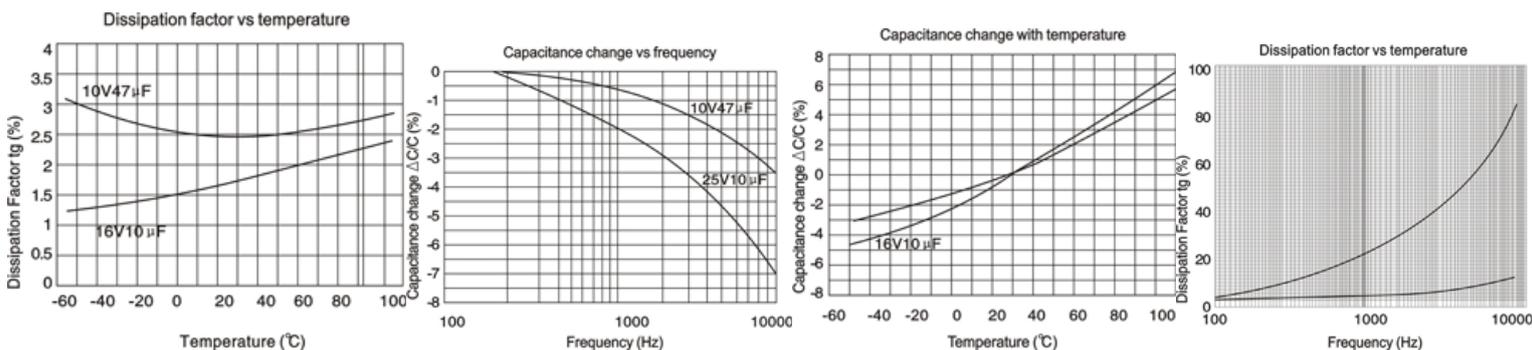
Capacitance (uF)	Cap. Change (%)			DF Max. (%)				DCL Max. (μF)		
	-55°C	+85°C	+125°C	-55°C	+25°C	+85°C	+125°C	+25°C	+85°C	+125°C
<1.0	±10	±15	±25	6	4	6	6	$I_o \leq 0.02 C_{RVR}$ or 1uF whichever is greater	+10 I <sub>o</sub>	+12.5I <sub>o</sub>
1.5 ~ 6.8				8	6	8	8			
10 ~ 68				10	8	10	10			
100 ~ 680				12	10	12	12			

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### Typical Characteristic Curve



### HOW TO ORDER

<b>TKT</b>	<b>0R1</b>	<b>M</b>	<b>350</b>	<b>2</b>	<b>B</b>	<b>R</b>
Series	1.	2.	3.	4.	5.	6.

#### NOTE:

##### 1. Nominal Capacitance

Code	0R1	R22	010	2R2	220	221
Capacitance	0.1uF	0.22uF	1uF	2.2uF	22uF	220uF

##### 2. Capacitance Tolerance

Code	J	K	M
Tolerance	±5%	±10%	±20%

##### 3. Rated Voltage

Code	040	060	100	160	200	250	350	500
Voltage	4V	6.3V	10V	16V	20V	25V	35V	50V

##### 4. Pitch

Code	2	5
Pitch (mm)	2.54	5.08

##### 5. Packing

Code	A	B
Packing	Ammo	Bulk

##### 6. Pb

Code	L	R
Pb	Lead	RoHS

Note: Specifications are subject to change without notice.