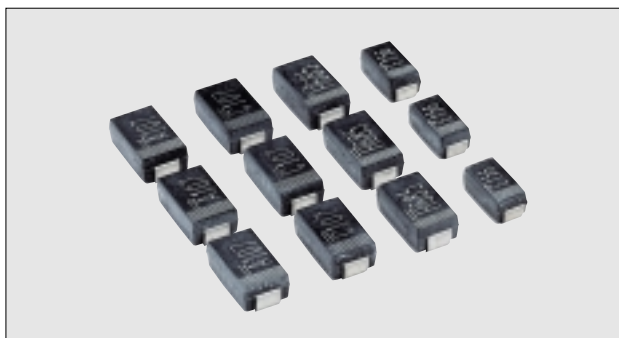


## TE SERIES

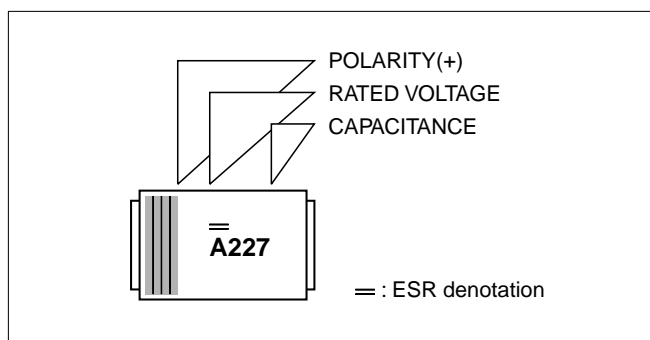
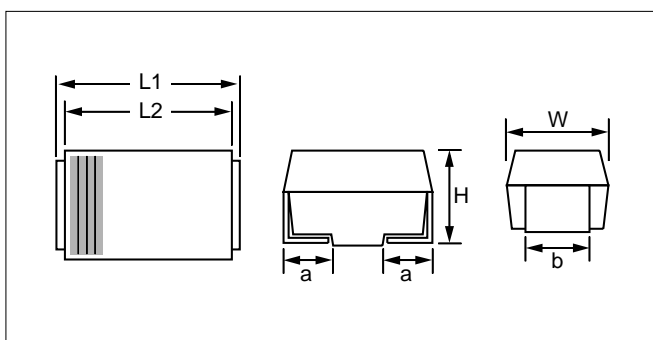
TANTALUM CAPACITOR



### FEATURES

- Capacitance : 4.7 $\mu$ F to 330 $\mu$ F
- 100% Surge current test on each size (A, B2, C, D)
- Capacitance tolerance :  $\pm 10\%$  (K),  $\pm 20\%$  (M)
- Low ESR
- Voltage : 6.3VDC to 50VDC

### CASE DIMENSIONS AND MARKINGS



(unit : mm)

Size	Code	L1	L2	W	H	a	b
A	A	3.2 $\pm$ 0.2 -0.1	2.9 $\pm$ 0.1	1.6 $\pm$ 0.2	1.6 $\pm$ 0.2	0.8 $\pm$ 0.3	1.2 $\pm$ 0.2
B2	T	3.5 $\pm$ 0.3	3.2 $\pm$ 0.1	2.8 $\pm$ 0.3	1.9 $\pm$ 0.3	0.8 $\pm$ 0.3	2.2 $\pm$ 0.2
C	C	6.0 $\pm$ 0.3	5.8 $\pm$ 0.1	3.2 $\pm$ 0.3	2.5 $\pm$ 0.3	1.3 $\pm$ 0.3	2.2 $\pm$ 0.2
D	D	7.3 $\pm$ 0.3	7.1 $\pm$ 0.1	4.3 $\pm$ 0.3	2.8 $\pm$ 0.3	1.3 $\pm$ 0.3	2.4 $\pm$ 0.2

### ORDERING INFORMATION

T
E
M
1
A
2
2
7
D
S
S
R

Series ——— T  
 Capacitance Tolerance\* ——— E  
 Rated Voltage ——— M  
 Capacitance\* ——— 1

Case size ——— D  
 Convert of Design ——— S  
 Lead Dimension ——— S  
 Taping ——— R

Capacitance\* : First two digits represent significant figures.  
 Third digit specifies number of zeros to follow.

Capacitance Tolerance\* : M -  $\pm 20\%$   
 K -  $\pm 10\%$

## SPECIFICATIONS

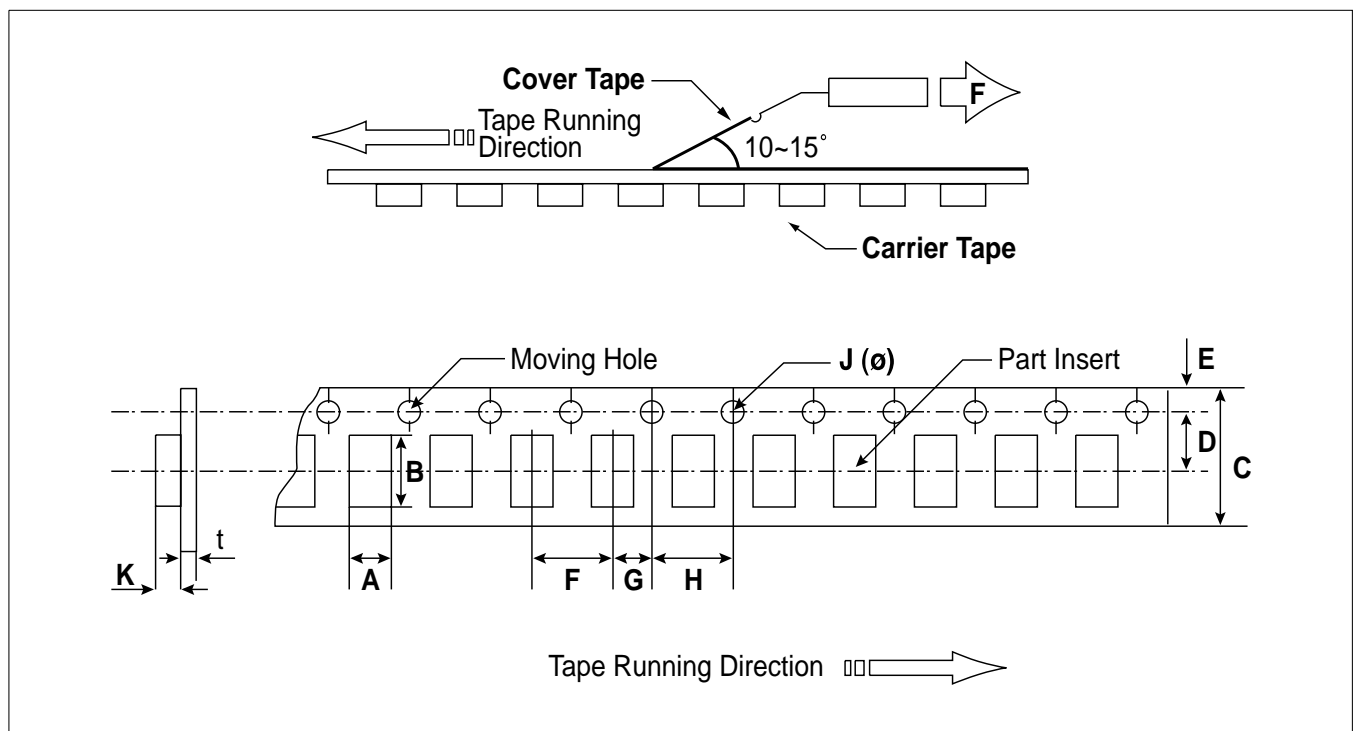
Capacitance	Range	4.7 $\mu$ F to 330 $\mu$ F							
	Tolerance	$\pm$ 20%(M), $\pm$ 10%(K)							
Dissipation Factor (tan $\delta$ )	$C \leq 1.0\mu\text{F}$	D.F $\leq$ 4.0%							
	$1.5\mu\text{F} \leq C \leq 68\mu\text{F}$	D.F $\leq$ 8.0%							
	$100\mu\text{F} \geq C$	D.F $\leq$ 10.0%							
Leakage Current		between 0.01CV and 0.5 $\mu$ A, whichever is higher							
Rated Voltage (V <sub>R</sub> )		<b>4.0</b>	<b>6.3</b>	<b>10.0</b>	<b>16.0</b>	<b>20.0</b>	<b>25.0</b>	<b>35.0</b>	<b>50.0</b>
Operating Voltage (V <sub>O</sub> )	$T \leq 85^{\circ}\text{C}$	4.0	6.3	10.0	16.0	20.0	25.0	35.0	50.0
	$85 < T \leq 125^{\circ}\text{C}$	2.5	4.0	6.3	10.0	13.0	16.0	22.0	32.0
Surge Voltage (V <sub>S</sub> )	$T \leq 85^{\circ}\text{C}$	5.2	8.0	13.0	20.0	25.0	32.0	44.0	63.0
	$85 < T \leq 125^{\circ}\text{C}$	3.2	5.0	8.0	13.0	16.0	20.0	28.0	40.0
Operating Temperature		-55 $^{\circ}$ C to 125 $^{\circ}$ C							

## CAPACITANCE AND VOLTAGE RANGE

Cap( $\mu$ F)		W.V		6.3	10	16	20	25	35	50
		1.0	105							
1.5	155									
2.2	225									
3.3	335									
4.7	475								C(600)	
6.8	685									D(500)
10	106							C(500)		
15	156						C(450)	C(300)	D(300)	
22	226					C(375)	C(300)	D(200)	D(300)	
33	336			C(375)		C(300)	D(200)	D(300)		
47	476		C(350)			D(150)				
68	686						D(150)			
100	107		C(150)	D(100)		D(125)				
150	157		D(100)	D(100)						
220	227		D(100)	D(100)						
330	337		D(100)							( ) : ESR Upper Limit, m $\Omega$

## TAPE AND REEL DIMENSIONS

- Tape : Semitransparent emboss tape
- Cover tape : Attached for heating press polyester or adhesive cover tape
- The tension of removing cover tape
  - Heating press :  $F = 50 \pm 20g$
  - Adhesive :  $F = 30 \pm 15g$



### TE Series Reel Dimensions

(unit : mm)

Classification	Size A	Size B2	Size C	Size D
A	1.90±0.1	3.2±0.1	3.69±0.1	4.80±0.1
B	3.50±0.1	3.83±0.1	6.49±0.1	7.79±0.1
C	8.0±0.3	8.0±0.3	12.0±0.3	12.0±0.3
D	3.5±0.05	3.5±0.05	5.50±0.05	5.50±0.05
E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
F	4.0±0.1	4.0±0.1	8.0±0.1	8.0±0.1
G	2.0±0.05			
H	4.0±0.1			
J	1.5+0.1, -0.0			
t	0.23±0.02	0.23±0.02	0.28±0.02	0.28±0.02
K	1.92±0.1	2.17±0.1	2.75±0.2	3.0±0.2
Packing Quantity	2,000pcs/Reel	2,000pcs/Reel	500pcs/Reel	500pcs/Reel
Inner Box	5 Reels (10kp)	5 Reels (10kp)	4 Reels (2kp)	4 Reels (2kp)
Outer Box	10 Inner Boxes(100kp)	10 Inner Boxes(100kp)	10 Inner Boxes(20kp)	10 Inner Boxes(20kp)

## TE SERIES RATINGS & PART NUMBER REFERENCE

Capacitance (μF)	SIZE	Part No.	tan δ (25°C) (%)	ESR (25°C) (Ω, 100kHz)	L.C (25°C) (μA)	Ripple Current (25°C, mA)
<b>Rated Voltage: 6.3V</b>						
47	C	TEM0J476CSSR	8	0.350	2.96	530
100	C	TEM0J107CSSR	10	0.150	6.30	810
150	D	TEM0J157DSSR	10	0.100	15.00	1,100
220	D	TEM0J227DSSR	10	0.100	13.86	1,100
330	D	TEM0J337DSSR	10	0.100	20.79	1,100
<b>Rated Voltage : 10V</b>						
33	C	TEM1A336CSSR	8	0.375	3.30	510
100	D	TEM1A107DSSR	10	0.100	10.00	1,100
150	D	TEM1A157DSSR	10	0.100	15.00	1,100
220	D	TEM1A227DSSR	10	0.100	22.00	1,100
<b>Rated Voltage : 16V</b>						
22	C	TEM1C227CSSR	8	0.375	3.52	510
33	C	TEM1C336CSSR	8	0.300	5.28	570
47	D	TEM1C476DSSR	8	0.150	7.52	890
100	D	TEM1C107DSSR	10	0.125	16.00	980
<b>Rated Voltage : 20V</b>						
15	C	TEM1D156CSSR	8	0.450	3.00	470
22	C	TEM1D226DSSR	8	0.300	4.40	570
33	D	TEM1D336DSSR	8	0.200	6.60	770
68	D	TEM1D686DSSR	8	0.150	13.60	890
<b>Rated Voltage : 25V</b>						
10	C	TEM1E106CSSR	8	0.500	2.50	440
15	C	TEM1E156CSSR	8	0.300	3.75	570
22	D	TEM1E226DSSR	8	0.200	5.50	770
33	D	TEM1E336DSSR	8	0.300	8.25	630
<b>Rated Voltage : 35V</b>						
4.7	C	TEM1V475CSSR	8	0.600	1.64	400
15	D	TEM1V156DSSR	8	0.300	5.25	630
22	D	TEM1V226DSSR	8	0.300	7.70	630
<b>Rated Voltage : 50V</b>						
6.8	D	TEM1H685DSSR	8	0.500	3.40	490