

TL SERIES

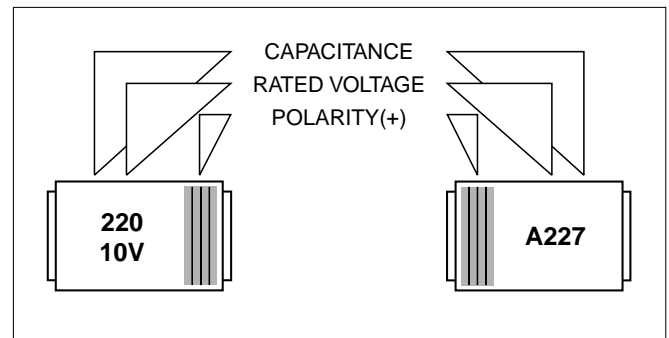
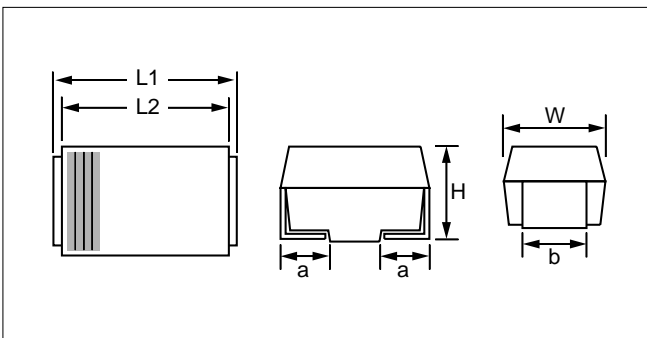
TANTALUM CAPACITOR



FEATURES

- Capacitance : 1.0 μ F to 680 μ F
- 100% Surge current test on each size (A, B2, C, D)
- Capacitance tolerance : $\pm 10\%$ (K), $\pm 20\%$ (M)
- Standard Range Values
- Voltage : 4VDC to 35VDC

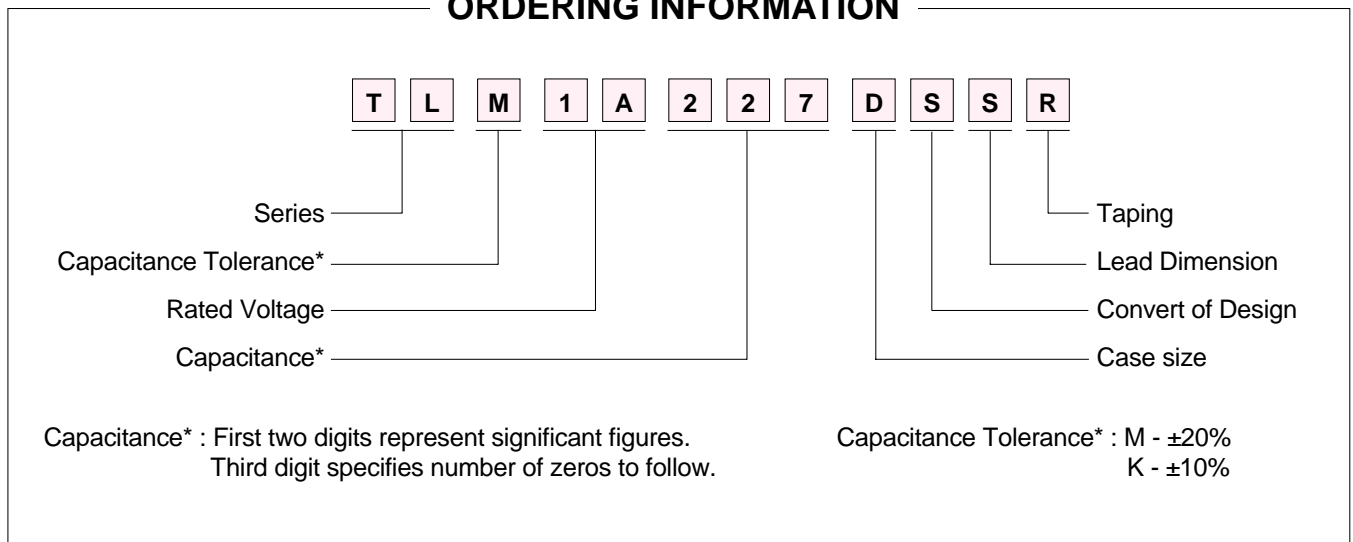
CASE DIMENSIONS AND MARKINGS



(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



SPECIFICATIONS

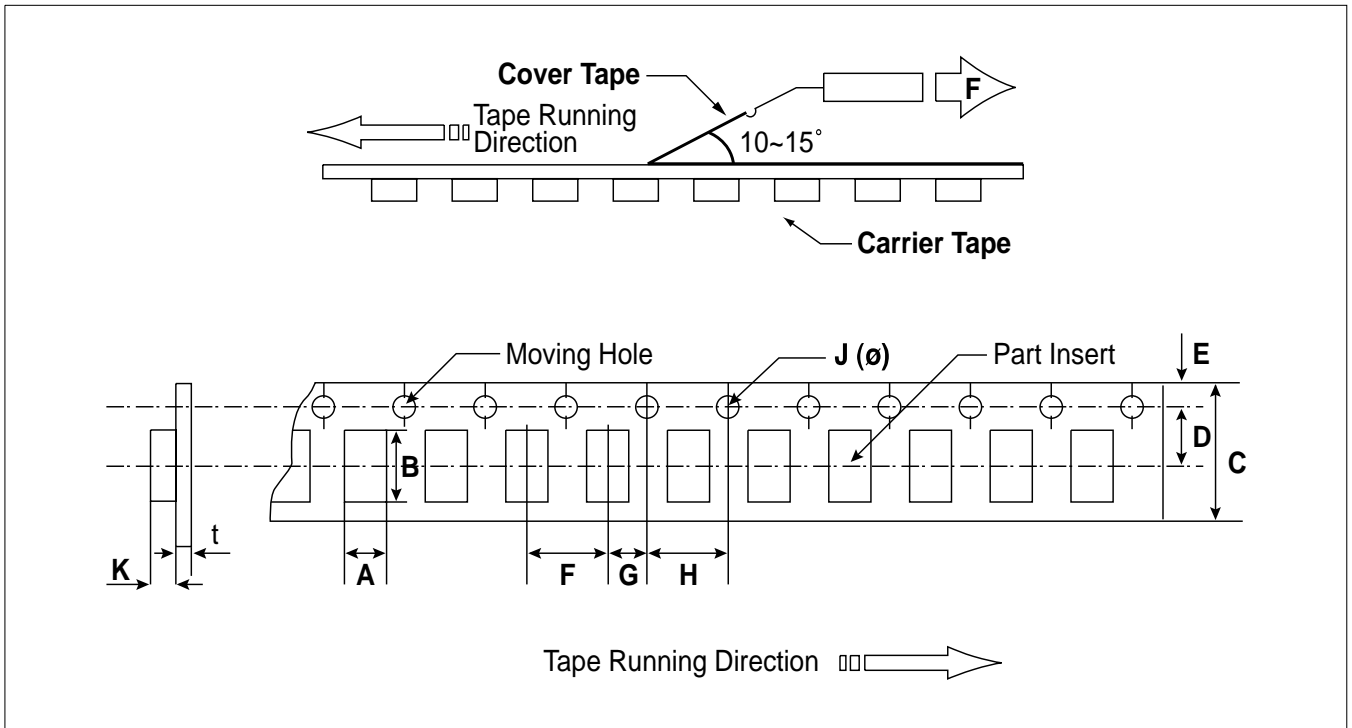
Capacitance	Range	1.0 μ F to 680 μ F							
	Tolerance	$\pm 20\%$ (M), $\pm 10\%$ (K)							
Dissipation Factor (tan δ)	$C \leq 1.0\mu\text{F}$	D.F $\leq 4.0\%$							
	$1.5\mu\text{F} \leq C \leq 6.8\mu\text{F}$	D.F $\leq 6.0\%$							
	$10\mu\text{F} \leq C \leq 68\mu\text{F}$	D.F $\leq 8.0\%$							
	$C \geq 100\mu\text{F}$	D.F $\leq 10.0\%$							
Leakage Current		between 0.01CV and 0.5 μ A, whichever is higher							
Rated Voltage (V _R)		4.0	6.3	10.0	16.0	20.0	25.0	35.0	50.0
Operating Voltage (V _O)	$T \leq 85^{\circ}\text{C}$	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 _S)	$T \leq 85^{\circ}\text{C}$	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(μ F)		W.V							
		4	6.3	10	16	20	25	35	
1.0	105								
1.5	155								
2.2	225						(A)		
3.3	335								
4.7	475					(A)			
6.8	685				A				
10	106				A			C	
15	156			A					
22	226		A	A			C	D	
33	336	A	A	B2		C	D		
47	476	(A)		B2	C				
68	686	B2	B2			(D)			
100	107	B2	B2	C	D				
150	157	C	(C)						
220	227	C		D					
330	337	D	D	(D)					
470	477	(D)							
680	687	(D)						() : Under Development	

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±20g
 - Adhesive : F =30±15g



• TL Series Tape 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)

TL SERIES RATINGS & PART NUMBER REFERENCE

Rated Voltage(V)	Cap (μF)	tan δ (%)	D.C.L (μA)	Size	Part No.
4	33	8.0	1.32	A	TLM0G336ASSR
4	47	8.0	1.88	A	TLM0G476ASSR
4	68	8.0	2.72	B2	TLM0G686TSSR
4	100	10.0	4.00	B2	TLM0G107TSSR
4	150	10.0	6.00	C	TLM0G157CSSR
4	220	10.0	8.80	C	TLM0G227CSSR
4	330	10.0	13.20	D	TLM0G337DSSR
4	470	10.0	18.80	D	TLM0G477DSSR
4	680	10.0	27.20	D	TLM0G687DSSR
6.3	22	8.0	1.39	A	TLM0J226ASSR
6.3	33	8.0	2.08	A	TLM0J336ASSR
6.3	68	8.0	4.28	B2	TLM0J686TSSR
6.3	100	10.0	6.30	B2	TLM0J107TSSR
6.3	150	10.0	9.45	C	TLM0J157CSSR
6.3	330	10.0	20.79	D	TLM0J337DSSR
10	15	8.0	1.50	A	TLM1A156ASSR
10	22	8.0	2.20	A	TLM1A226ASSR
10	33	8.0	3.30	B2	TLM1A336TSSR
10	47	8.0	4.70	B2	TLM1A476TSSR
10	100	10.0	10.00	C	TLM1A107CSSR
10	220	10.0	22.00	D	TLM1A227DSSR
16	6.8	6.0	1.09	A	TLM1C685ASSR
16	10	8.0	1.60	A	TLM1C106ASSR
16	47	8.0	7.52	C	TLM1C476CSSR
16	100	10.0	16.00	D	TLM1C107DSSR
20	6.8	6.0	1.36	A	TLM1D685ASSR
20	33	8.0	6.60	C	TLM1D336CSSR
20	68	8.0	13.60	D	TLM1D686DSSR
25	2.2	6.0	0.55	A	TLM1E225ASSR
25	22	8.0	5.50	C	TLM1E226CSSR
25	33	8.0	8.25	D	TLM1E336DSSR
35	10	8.0	3.50	C	TLM1V106CSSR
35	22	8.0	7.70	D	TLM1V226DSSR