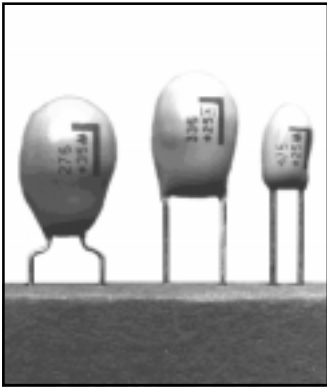


Type TDL Solid Tantalum Capacitors

MALLORY



- Tough Plastic Case
- UL94V0 Flammability Rating
- Laser Marking Clarity and Permanence
- Low Cost
- Low DCL
- Low ESR & Impedance
- Temperature Stable
- Long Shelf Life
- High Shock & Vibration
- Optional Reel Packaging Available

GENERAL SPECIFICATIONS

Operating Temperature:
-55°C to +125°C
(With proper derating)

Voltage Range:
6 to 50 WVDC @ 85°C

Reverse Voltage (Non-continuous):
15% of rated voltage @ 25°C
5% of rated voltage @ 85°C
1% of rated voltage @ 125°C

Capacitance Range:
.10 μ F to 330 μ F

Capacitance Tolerance:
 $\pm 10\%$, $\pm 20\%$
($\pm 5\%$ by special order)

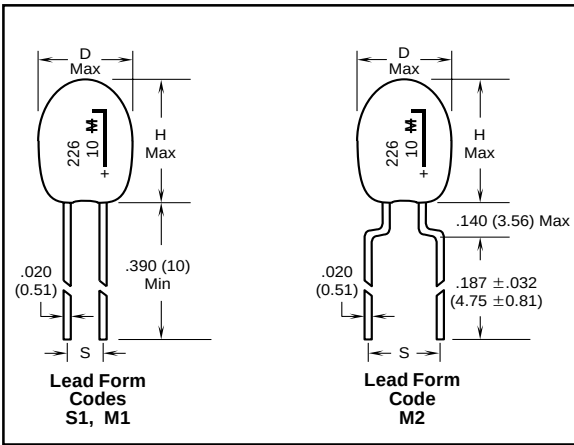
Capacitance Change From
Initial +25°C Value:
-10% @ -55°C
+10% @ +85°C
+12% @ +125°C

DC Leakage:
At +25°C - See Table Limit
At +85°C - 10 x Table Limit
At +125°C - 12.5 x Table Limit

Dimensions - Inches (Millimeters)

Case Code	D (Max.)	H (Max.)	Leads		Quantity Per Reel
			S	Code	
A	.180 (4.57)	.280 (7.11)	.100 (2.54) (Standard) .200 (5.08) (Special)	S1 M2	1,500
B	.200 (5.08)	.300 (7.62)	.100 (2.54) (Standard) .200 (5.08) (Special)	S1 M2	1,500
C	.260 (6.60)	.360 (9.14)	.100 (2.54) (Standard) .200 (5.08) (Special)	S1 M2	1,500
D	.340 (8.64)	.400 (10.16)	.100 (2.54) (Standard) .200 (5.08) (Special)	S1 M2	1,000
E	.400 (10.16)	.560 (14.22)	.200 (5.08) (Standard)	M1	1,000
F	.440 (11.18)	.680 (17.27)	.200 (5.08) (Standard)	M1	1,000

Listed Catalog Numbers reflect standard lead forms as indicated below.
M2 lead form and lead lengths of .500 (12.7) minimum are available by special order.



Cap (μ F)	Case Code	Lead Spacing S	Max DCL @ +25°C (μ A)	Max D.F. % @ +25°C 120 Hz	Catalog Number
6.3 WVDC; 8 VDC Surge @ 85°C 4 WVDC; 5 VDC Surge @ 125°C					
3.3	A	.100	0.5	5	TDL335*006S1A
3.9	A	.100	0.5	5	TDL395*006S1A
4.7	A	.100	0.5	5	TDL475*006S1A
5.6	A	.100	0.5	5	TDL565*006S1A
6.8	A	.100	0.5	5	TDL685*006S1A
8.2	B	.100	0.5	6	TDL825*006S1B
10	B	.100	0.5	6	TDL106*006S1B
12	B	.100	0.6	6	TDL126*006S1B
15	B	.100	0.7	6	TDL156*006S1B
18	B	.100	0.9	6	TDL186*006S1B
22	C	.100	1.1	6	TDL226*006S1C
27	C	.100	1.3	6	TDL276*006S1C
33	C	.100	1.6	6	TDL336*006S1C
39	C	.100	1.9	6	TDL396*006S1C
47	D	.100	2.3	6	TDL476*006S1D
56	D	.100	2.7	6	TDL566*006S1D
68	D	.100	3.3	6	TDL686*006S1D
82	D	.100	3.9	8	TDL826*006S1D
100	D	.100	4.8	8	TDL107*006S1D
120	D	.200	5.8	8	TDL127*006M1D
150	E	.200	7.2	8	TDL157*006M1E
180	E	.200	8.6	8	TDL187*006M1E
220	E	.200	10.0	8	TDL227*006M1E
270	E	.200	10.0	8	TDL277*006M1E
330	F	.200	10.0	8	TDL337*006M1F

10 WVDC; 13 VDC Surge @ 85°C 7 WVDC; 9 VDC Surge @ 125°C					
2.2	A	.100	0.5	5	TDL225*010S1A
2.7	A	.100	0.5	5	TDL275*010S1A
3.3	A	.100	0.5	5	TDL335*010S1A
3.9	A	.100	0.5	5	TDL395*010S1A

Cap (μ F)	Case Code	Lead Spacing S	Max DCL @ +25°C (μ A)	Max D.F. % @ +25°C 120 Hz	Catalog Number
10 WVDC; 13 VDC Surge @ 85°C 7 WVDC; 9 VDC Surge @ 125°C					
4.7	A	.100	0.5	5	TDL475*010S1A
5.6	A	.100	0.5	5	TDL565*010S1A
6.8	B	.100	0.5	5	TDL685*010S1B
8.2	B	.100	0.7	6	TDL825*010S1B
10	B	.100	0.8	6	TDL106*010S1B
12	C	.100	1.0	6	TDL126*010S1C
15	C	.100	1.2	6	TDL156*010S1C
18	C	.100	1.4	6	TDL186*010S1C
22	C	.100	1.8	6	TDL226*010S1C
27	C	.100	2.2	6	TDL276*010S1C
33	D	.100	2.6	6	TDL336*010S1D
39	D	.100	3.1	6	TDL396*010S1D
47	D	.100	3.8	6	TDL476*010S1D
56	D	.100	4.5	6	TDL566*010S1D
68	D	.100	5.4	6	TDL686*010S1D
82	E	.200	6.6	8	TDL826*010M1E
100	E	.200	8.0	8	TDL107*010M1E
120	E	.200	9.6	8	TDL127*010M1E
150	E	.200	10.0	8	TDL157*010M1E
180	E	.200	10.0	8	TDL187*010M1E
220	F	.200	10.0	8	TDL227*010M1F

16 WVDC; 20 VDC Surge @ 85°C 10 WVDC; 12 VDC Surge @ 125°C					
1.5	A	.100	0.5	5	TDL155*016S1A
1.8	A	.100	0.5	5	TDL185*016S1A
2.2	A	.100	0.5	5	TDL225*016S1A
2.7	A	.100	0.5	5	TDL275*016S1A
3.3	A	.100	0.5	5	TDL335*016S1A
3.9	B	.100	0.5	5	TDL395*016S1B
4.7	B	.100	0.6	5	TDL475*016S1B
5.6	B	.100	0.7	5	TDL565*016S1B

* Indicate capacitance tolerance: K = $\pm 10\%$, M = $\pm 20\%$, (J = $\pm 5\%$, Special Order)

MALLORY reserves the right to substitute a tighter tolerance, higher voltage capacitor within the same case size.

Type TDL Solid Tantalum Capacitors

MALLORY

Cap (μ F)	Case Code	Lead Spacing S	Max DCL @ +25°C (μ A)	Max D.F. % @+25°C 120 Hz	Catalog Number
16 WVDC; 20 VDC Surge @ 85°C 10 WVDC; 12 VDC Surge @ 125°C					
6.8	B	.100	0.9	5	TDL685*016S1B
8.2	C	.100	1.0	6	TDL825*016S1C
10	C	.100	1.3	6	TDL106*016S1C
12	C	.100	1.5	6	TDL126*016S1C
15	C	.100	1.8	6	TDL156*016S1C
18	C	.100	2.2	6	TDL186*016S1C
22	D	.100	2.6	6	TDL226*016S1D
27	D	.100	3.2	6	TDL276*016S1D
33	D	.100	4.0	6	TDL336*016S1D
39	E	.200	4.7	6	TDL396*016M1E
47	E	.200	5.6	6	TDL476*016M1E
56	E	.200	6.8	6	TDL566*016M1E
68	E	.200	8.2	6	TDL686*016M1E
82	E	.200	9.8	8	TDL826*016M1E
100	F	.200	10.0	8	TDL107*016M1F
120	F	.200	10.0	8	TDL127*016M1F
150	F	.200	10.0	8	TDL157*016M1F

20 WVDC; 26 VDC Surge @ 85°C 13 WVDC; 16 VDC Surge @ 125°C					
1.0	A	.100	0.5	3	TDL105*020S1A
1.2	A	.100	0.5	5	TDL125*020S1A
1.5	A	.100	0.5	5	TDL155*020S1A
1.8	A	.100	0.5	5	TDL185*020S1A
2.2	A	.100	0.5	5	TDL225*020S1A
2.7	A	.100	0.5	5	TDL275*020S1A
3.3	A	.100	0.5	5	TDL335*020S1A
3.9	B	.100	0.6	5	TDL395*020S1B
4.7	B	.100	0.8	5	TDL475*020S1B
5.6	B	.100	0.9	5	TDL565*020S1B
6.8	B	.100	1.1	5	TDL685*020S1B
8.2	B	.100	1.3	6	TDL825*020S1B
10	C	.100	1.6	6	TDL106*020S1C
12	C	.100	1.9	6	TDL126*020S1C
15	C	.100	2.4	6	TDL156*020S1C
18	C	.100	2.9	6	TDL186*020S1C
22	C	.100	3.5	6	TDL226*020S1C
27	E	.200	4.3	6	TDL276*020M1E
33	E	.200	5.3	6	TDL336*020M1E
39	E	.200	6.2	6	TDL396*020M1E
47	E	.200	7.5	6	TDL476*020M1E
56	E	.200	9.0	6	TDL566*020M1E
68	E	.200	10.0	6	TDL686*020M1E
82	F	.200	10.0	8	TDL826*020M1F
100	F	.200	10.0	8	TDL107*020M1F

25 WVDC; 32 VDC Surge @ 85°C 16.5 WVDC; 21.5 VDC Surge @ 125°C					
1.0	A	.100	0.5	3	TDL105*025S1A
1.2	A	.100	0.5	5	TDL125*025S1A
1.5	A	.100	0.5	5	TDL155*025S1A
1.8	A	.100	0.5	5	TDL185*025S1A
2.2	B	.100	0.5	5	TDL225*025S1B
2.7	B	.100	0.5	5	TDL275*025S1B
3.3	B	.100	0.7	5	TDL335*025S1B
3.9	B	.100	0.8	5	TDL395*025S1B
4.7	C	.100	0.9	5	TDL475*025S1C
5.6	C	.100	1.1	5	TDL565*025S1C
6.8	C	.100	1.4	5	TDL685*025S1C
8.2	C	.100	1.6	6	TDL825*025S1C
10	C	.100	2.0	6	TDL106*025S1C
12	C	.100	2.4	6	TDL126*025S1C
15	D	.100	3.0	6	TDL156*025S1D
18	D	.100	3.6	6	TDL186*025S1D
22	D	.100	4.4	6	TDL226*025S1D
27	E	.100	5.4	6	TDL276*025M1E
33	E	.100	6.6	6	TDL336*025M1E
39	E	.100	7.8	6	TDL396*025M1E
47	E	.100	9.4	6	TDL476*025M1E

25 WVDC; 32 VDC Surge @ 85°C 16.5 WVDC; 21.5 VDC Surge @ 125°C					
56	E	.100	10.0	6	TDL566*025M1E
68	F	.100	10.0	6	TDL686*025M1F

35 WVDC; 46 VDC Surge @ 85°C 23 WVDC; 28 VDC Surge @ 125°C					
0.10	A	.100	0.5	3	TDL104*035S1A
0.12	A	.100	0.5	3	TDL124*035S1A
0.15	A	.100	0.5	3	TDL154*035S1A
0.18	A	.100	0.5	3	TDL184*035S1A
0.22	A	.100	0.5	3	TDL224*035S1A
0.27	A	.100	0.5	3	TDL274*035S1A
0.33	A	.100	0.5	3	TDL334*035S1A
0.39	A	.100	0.5	3	TDL394*035S1A
0.47	A	.100	0.5	3	TDL474*035S1A
0.56	A	.100	0.5	3	TDL564*035S1A
0.68	A	.100	0.5	3	TDL684*035S1A
0.82	A	.100	0.5	3	TDL824*035S1A
1.0	B	.100	0.5	3	TDL105*035S1B
1.2	B	.100	0.5	5	TDL125*035S1B
1.5	B	.100	0.5	5	TDL155*035S1B
1.8	B	.100	0.5	5	TDL185*035S1B
2.2	C	.100	0.6	5	TDL225*035S1C
2.7	C	.100	0.7	5	TDL275*035S1C
3.3	C	.100	0.9	5	TDL335*035S1C
3.9	C	.100	1.0	5	TDL395*035S1C
4.7	D	.100	1.3	5	TDL475*035S1D
5.6	D	.100	1.6	5	TDL565*035S1D
6.8	D	.100	1.9	5	TDL685*035S1D
8.2	D	.100	2.3	6	TDL825*035S1D
10	D	.100	2.8	6	TDL106*035S1D
12	E	.200	3.4	6	TDL126*035M1E
15	E	.200	4.2	6	TDL156*035M1E
18	E	.200	5.0	6	TDL186*035M1E
22	E	.200	6.2	6	TDL226*035M1E
27	E	.200	7.6	6	TDL276*035M1E
33	F	.200	9.2	6	TDL336*035M1F
39	F	.200	10.0	6	TDL396*035M1F
47	F	.200	10.0	6	TDL476*035M1F

50 WVDC; 65 VDC Surge @ 85°C 33 WVDC; 40 VDC Surge @ 125°C					
0.10	A	.100	0.5	3	TDL104*050S1A
0.12	A	.100	0.5	3	TDL124*050S1A
0.15	A	.100	0.5	3	TDL154*050S1A
0.18	A	.100	0.5	3	TDL184*050S1A
0.22	A	.100	0.5	3	TDL224*050S1A
0.27	A	.100	0.5	3	TDL274*050S1A
0.33	A	.100	0.5	3	TDL334*050S1A
0.39	A	.100	0.5	3	TDL394*050S1A
0.47	B	.100	0.5	3	TDL474*050S1B
0.56	B	.100	0.5	3	TDL564*050S1B
0.68	B	.100	0.5	3	TDL684*050S1B
0.82	B	.100	0.5	3	TDL824*050S1B
1.0	C	.100	0.5	3	TDL105*050S1C
1.2	C	.100	0.5	5	TDL125*050S1C
1.5	C	.100	0.6	5	TDL155*050S1C
1.8	C	.100	0.7	5	TDL185*050S1C
2.2	D	.100	0.9	5	TDL225*050S1D
2.7	D	.100	1.1	5	TDL275*050S1D
3.3	D	.100	1.3	5	TDL335*050S1D
3.9	D	.100	1.6	5	TDL395*050S1D
4.7	D	.100	1.9	5	TDL475*050S1D
5.6	D	.100	2.2	5	TDL565*050S1D
6.8	F	.200	2.7	5	TDL685*050M1F
8.2	F	.200	3.3	6	TDL825*050M1F
10	F	.200	4.0	6	TDL106*050M1F
12	F	.200	4.8	6	TDL126*050M1F
15	F	.200	6.0	6	TDL156*050M1F
18	F	.200	7.2	6	TDL186*050M1F
22	F	.200	8.8	6	TDL226*050M1F

NACC reserves the right to substitute a tighter tolerance, higher voltage capacitor within the same case size.

* Indicate capacitance tolerance: K = $\pm 10\%$, M = $\pm 20\%$, (J = $\pm 5\%$, Special Order)