Dipped, Radial Leaded, Solid Tantalum Capacitors

As a low cost alternative to molded solid tantalum capacitors, the Type TDC, constructed in a tough, radial dipped flame retardant plastic case, assures the user that it is a top performer with such attributes as low DCL, low ESR, low impedance and a great value with low in-place cost. The Type TDC is high shock and vibration resistant and is available in bulk or on radial tape and reel.

Highlights

- Tough plastic case
- Low DCL
- Low ESR and impedance
- Low cost
- Temperature stable
- UL94VO flammability rating
- Resistant to shock and vibration

Specifications

Capacitance Range:	0.10 µF to 330 µF
Voltage Range:	6 WVdc to 50 WVdc at 85 ºC
Tolerance:	±10%, ±20%
Operating Temperature Range:	–55 ºC to +125 ºC (with proper derating)
DC Leakage:	+25 ºC - See ratings limit +85 ºC - 10 x ratings limit +125 ºC - 12.5 x ratings limit
Capacitance Change Maximum:	–10% @ –55 ºC +10% @ +85 ºC +12% @ +125 ºC
Reverse Voltage (Non-continuous):	15% of rated voltage @ 25 ºC 5% of rated voltage @ 85 ºC 1% of rated voltage @ 125 ºC

Reel Packaging:

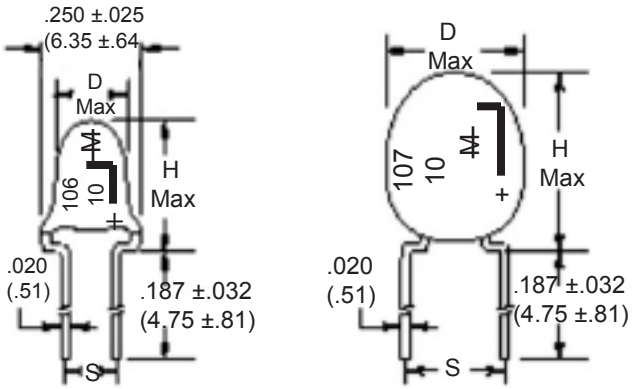
Case Code	Quantity per Reel
E	1,000
F	1,000
G	1,000

RoHS Compliant

Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

Type TDC Solid Tantalum Capacitors

Capacitor Outline Drawing



Dimensions - Inches (Millimeters)				
Case Code	D (Max.)	H (Max.)	Leads S	Leads Code
E	.175 (4.45)	.350 (8.89)	.125 (3.17) (Standard)	N
			.250 (6.35) (Special)	W
F	.250 (6.35)	.500 (12.7)	.125 (3.17) (Standard)	N
			.250 (6.35) (Special)	W
G	.350 (8.89)	.650 (16.51)	.250 (6.35) (Special)	W

E and F Case Codes:
Lead Spacing = .125 ±.025
(3.17 ±.64)

G Case Code:
Lead Spacing = .250 ±.025
(6.34 ±.64)

Ratings

Cap (µF)	Catalog Part Number	Case Code	Lead Spacing (S)	Max. DCL @ +25 °C (µA)	Max. DF @ +25 °C 120 Hz (%)
6 WVdc; 8 Vdc Surge @ 85 °C 4 WVdc; 5 Vdc Surge @ 125 °C					
3.3	TDC335*006NSE-F	E	0.125	0.5	5
3.9	TDC395*006NSE-F	E	0.125	0.5	5
4.7	TDC475*006NSE-F	E	0.125	0.5	5
5.6	TDC565*006NSE-F	E	0.125	0.5	5
6.8	TDC685*006NSE-F	E	0.125	0.5	5
8.2	TDC825*006NSE-F	E	0.125	0.5	6
10	TDC106*006NSE-F	E	0.125	0.5	6
12	TDC126*006NSE-F	E	0.125	0.6	6
15	TDC156*006NSF-F	F	0.125	0.7	6
18	TDC186*006NSF-F	F	0.125	0.9	6
22	TDC226*006NSF-F	F	0.125	1.1	6
27	TDC276*006NSF-F	F	0.125	1.3	6
33	TDC336*006NSF-F	F	0.125	1.6	6
39	TDC396*006NSF-F	F	0.125	1.9	6
47	TDC476*006NSF-F	F	0.125	2.3	6
56	TDC566*006NSF-F	F	0.125	2.7	6
68	TDC686*006NSF-F	F	0.125	3.3	6
82	TDC826*006NSF-F	F	0.125	3.9	8
100	TDC107*006NSF-F	F	0.125	4.8	8
120	TDC127*006WSG-F	G	0.25	5.8	8
150	TDC157*006WSG-F	G	0.25	7.2	8
180	TDC187*006WSG-F	G	0.25	8.6	8
220	TDC227*006WSG-F	G	0.25	10	8
270	TDC277*006WSG-F	G	0.25	10	8
330	TDC337*006WSG-F	G	0.25	10	8

Cap (µF)	Catalog Part Number	Case Code	Lead Spacing (S)	Max. DCL @ +25 °C (µA)	Max. DF @ +25 °C 120 Hz (%)
10 WVdc; 13 Vdc Surge @ 85 °C 7 WVdc; 9 Vdc Surge @ 125 °C					
2.2	TDC225*010NSE-F	E	0.125	0.5	5
2.7	TDC275*010NSE-F	E	0.125	0.5	5
3.3	TDC335*010NSE-F	E	0.125	0.5	5
3.9	TDC395*010NSE-F	E	0.125	0.5	5
4.7	TDC475*010NSE-F	E	0.125	0.5	5
5.6	TDC565*010NSE-F	E	0.125	0.5	5
6.8	TDC685*010NSE-F	E	0.125	0.5	5
8.2	TDC825*010NSE-F	E	0.125	0.7	6
10	TDC106*010NSF-F	F	0.125	0.8	6
12	TDC126*010NSF-F	F	0.125	1.0	6
15	TDC156*010NSF-F	F	0.125	1.2	6
18	TDC186*010NSF-F	F	0.125	1.4	6
22	TDC226*010NSF-F	F	0.125	1.8	6
27	TDC276*010NSF-F	F	0.125	2.2	6
33	TDC336*010NSF-F	F	0.125	2.6	6
39	TDC396*010NSF-F	F	0.125	3.1	6
47	TDC476*010NSF-F	F	0.125	3.8	6
56	TDC566*010NSF-F	F	0.125	4.5	6
68	TDC686*010NSF-F	F	0.125	5.4	6
82	TDC826*010WSG-F	G	0.25	6.6	8
100	TDC107*010WSG-F	G	0.25	8.0	8
120	TDC127*010WSG-F	G	0.25	9.6	8
150	TDC157*010WSG-F	G	0.25	10.0	8
180	TDC187*010WSG-F	G	0.25	10.0	8
220	TDC227*010WSG-F	G	0.25	10.0	8

* Indicates capacitance tolerance: K = ±10%, M = ±20%, (J = ±5%, Special Order)

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

Ratings

Cap (µF)	Catalog Part Number	Case Code	Lead Spacing (S)	Max. DCL @ +25 °C (µA)	Max. DF @ +25 °C 120 Hz (%)
16 WVdc; 20 Vdc Surge @ 85 °C 10 WVdc; 12 Vdc Surge @ 125 °C					
1.5	TDC155*016NSE-F	E	0.125	0.5	5
1.8	TDC185*016NSE-F	E	0.125	0.5	5
2.2	TDC225*016NSE-F	E	0.125	0.5	5
2.7	TDC275*016NSE-F	E	0.125	0.5	5
3.3	TDC335*016NSE-F	E	0.125	0.5	5
3.9	TDC395*016NSE-F	E	0.125	0.5	5
4.7	TDC475*016NSE-F	E	0.125	0.6	5
5.6	TDC565*016NSE-F	E	0.125	0.7	5
6.8	TDC685*016NSE-F	E	0.125	0.9	5
8.2	TDC825*016NSE-F	E	0.125	1.0	6
10	TDC106*016NSF-F	F	0.125	1.3	6
12	TDC126*016NSF-F	F	0.125	1.5	6
15	TDC156*016NSF-F	F	0.125	1.8	6
18	TDC186*016NSF-F	F	0.125	2.2	6
22	TDC226*016NSF-F	F	0.125	2.6	6
27	TDC276*016NSF-F	F	0.125	3.2	6
33	TDC336*016NSF-F	F	0.125	4.0	6
39	TDC396*016WSG-F	G	0.25	4.7	6
47	TDC476*016WSG-F	G	0.25	5.6	6
56	TDC566*016WSG-F	G	0.25	6.8	6
68	TDC686*016WSG-F	G	0.25	8.2	6
82	TDC826*016WSG-F	G	0.25	9.8	8
100	TDC107*016WSG-F	G	0.25	10.0	8
120	TDC127*016WSG-F	G	0.25	10.0	8
150	TDC157*016WSG-F	G	0.25	10.0	8
20 WVdc; 26 Vdc Surge @ 85 °C 13 WVdc; 16 Vdc Surge @ 125 °C					
1.0	TDC105*020NSE-F	E	0.125	0.5	3
1.2	TDC125*020NSE-F	E	0.125	0.5	5
1.5	TDC155*020NSE-F	E	0.125	0.5	5
1.8	TDC185*020NSE-F	E	0.125	0.5	5
2.2	TDC225*020NSE-F	E	0.125	0.5	5
2.7	TDC275*020NSE-F	E	0.125	0.5	5
3.3	TDC335*020NSE-F	E	0.125	0.5	5
3.9	TDC395*020NSE-F	E	0.125	0.6	5
4.7	TDC475*020NSE-F	E	0.125	0.8	5
5.6	TDC565*020NSF-F	F	0.125	0.9	5
6.8	TDC685*020NSF-F	F	0.125	1.1	5

Cap (µF)	Catalog Part Number	Case Code	Lead Spacing (S)	Max. DCL @ +25 °C (µA)	Max. DF @ +25 °C 120 Hz (%)
20 WVdc; 26 Vdc Surge @ 85 °C 13 WVdc; 16 Vdc Surge @ 125 °C					
8.2	TDC825*020NSF-F	F	0.125	1.3	6
10	TDC106*020NSF-F	F	0.125	1.6	6
12	TDC126*020NSF-F	F	0.125	1.9	6
15	TDC156*020NSF-F	F	0.125	2.4	6
18	TDC186*020NSF-F	F	0.125	2.9	6
22	TDC226*020NSF-F	F	0.125	3.5	6
33	TDC336*020WSG-F	G	0.25	5.3	6
39	TDC396*020WSG-F	G	0.25	6.2	6
47	TDC476*020WSG-F	G	0.25	7.5	6
56	TDC566*020WSG-F	G	0.25	9.0	6
68	TDC686*020WSG-F	G	0.25	10.0	6
82	TDC826*020WSG-F	G	0.25	10.0	8
100	TDC107*020WSG-F	G	0.25	10.0	8
25 WVdc; 32 Vdc Surge @ 85 °C 17 WVdc; 22 Vdc Surge @ 125 °C					
1.0	TDC105*025NSE-F	E	0.125	0.50	3
1.2	TDC125*025NSE-F	E	0.125	0.50	5
1.5	TDC155*025NSE-F	E	0.125	0.50	5
1.8	TDC185*025NSE-F	E	0.125	0.50	5
2.2	TDC225*025NSE-F	E	0.125	0.50	5
2.7	TDC275*025NSE-F	E	0.125	0.50	5
3.3	TDC335*025NSE-F	E	0.125	0.70	5
3.9	TDC395*025NSE-F	E	0.125	0.80	5
4.7	TDC475*025NSF-F	F	0.125	0.90	5
5.6	TDC565*025NSF-F	F	0.125	1.10	5
6.8	TDC685*025NSF-F	F	0.125	1.40	5
8.2	TDC825*025NSF-F	F	0.125	1.60	6
10	TDC106*025NSF--F	F	0.125	2.0	6
12	TDC126*025NSF-F	F	0.125	2.4	6
15	TDC156*025NSF-F	F	0.125	3.0	6
18	TDC186*025NSF-F	F	0.125	3.6	6
22	TDC226*025NSF-F	F	0.125	4.4	6
27	TDC276*025WSG-F	G	0.250	5.4	6
33	TDC336*025WSG-F	G	0.250	6.6	6
39	TDC396*025WSG-F	G	0.250	7.8	6
47	TDC476*025WSG-F	G	0.250	9.4	6
56	TDC566*025WSG-F	G	0.250	10.0	6
68	TDC686*025WSG-F	G	0.250	10.0	6

* Indicates capacitance tolerance: K = ±10%, M = ±20%, (J = ±5%, Special Order)

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

Type TDC Solid Tantalum Capacitors

Ratings

Cap (µF)	Catalog Part Number	Case Code	Lead Spacing (S)	Max. DCL @ +25 °C (µA)	Max. DF @ +25 °C 120 Hz (%)
35 WVdc; 46 Vdc Surge @ 85 °C 23 WVdc; 28 Vdc Surge @ 125 °C					
0.10	TDC104*035NSE-F	E	0.125	0.5	3
0.12	TDC124*035NSE-F	E	0.125	0.5	3
0.15	TDC154*035NSE-F	E	0.125	0.5	3
0.18	TDC184*035NSE-F	E	0.125	0.5	3
0.22	TDC224*035NSE-F	E	0.125	0.5	3
0.27	TDC274*035NSE-F	E	0.125	0.5	3
0.33	TDC334*035NSE-F	E	0.125	0.5	3
0.39	TDC394*035NSE-F	E	0.125	0.5	3
0.47	TDC474*035NSE-F	E	0.125	0.5	3
0.56	TDC564*035NSE-F	E	0.125	0.5	3
0.68	TDC684*035NSE-F	E	0.125	0.5	3
0.82	TDC824*035NSE-F	E	0.125	0.5	3
1.0	TDC105*035NSE-F	E	0.125	0.5	3
1.2	TDC125*035NSE-F	E	0.125	0.5	5
1.5	TDC155*035NSE-F	E	0.125	0.5	5
1.8	TDC185*035NSE--F	E	0.125	0.5	5
2.2	TDC225*035NSE-F	E	0.125	0.6	5
2.7	TDC275*035NSF-F	F	0.125	0.7	5
3.3	TDC335*035NSF-F	F	0.125	0.9	5
3.9	TDC339*035NSF-F	F	0.125	1.0	5
4.7	TDC475*035NSF-F	F	0.125	1.3	5
5.6	TDC565*035NSF-F	F	0.125	1.6	5
6.8	TDC685*035NSF-F	F	0.125	1.9	5
8.2	TDC825*035NSF-F	F	0.125	2.3	6
10	TDC106*035NSF-F	F	0.125	2.8	6
12	TDC126*035WSG-F	G	0.25	3.4	6
15	TDC156*035WSG-F	G	0.25	4.2	6
18	TDC186*035WSG-F	G	0.25	5.0	6
22	TDC226*035WSG-F	G	0.25	6.2	6
27	TDC276*035WSG-F	G	0.25	7.6	6
33	TDC336*035WSG-F	G	0.25	9.2	6
39	TDC396*035WSG-F	G	0.25	10	6
47	TDC476*035WSG-F	G	0.25	10	6

Cap (µF)	Catalog Part Number	Case Code	Lead Spacing (S)	Max. DCL @ +25 °C (µA)	Max. DF @ +25 °C 120 Hz (%)
50 WVdc; 65 Vdc Surge @ 85 °C 33 WVdc; 40 Vdc Surge @ 125 °C					
.10	TDC104*050NSE-F	E	0.125	0.5	3
.12	TDC124*050NSE-F	E	0.125	0.5	3
.15	TDC154*050NSE-F	E	0.125	0.5	3
.18	TDC184*050NSE-F	E	0.125	0.5	3
.22	TDC224*050NSE-F	E	0.125	0.5	3
.27	TDC274*050NSE-F	E	0.125	0.5	3
.33	TDC334*050NSE-F	E	0.125	0.5	3
.39	TDC394*050NSE-F	E	0.125	0.5	3
.47	TDC474*050NSE-F	E	0.125	0.5	3
.56	TDC564*050NSE-F	E	0.125	0.5	3
.68	TDC684*050NSE-F	E	0.125	0.5	3
.82	TDC824*050NSE-F	E	0.125	0.5	3
1.0	TDC105*050NSE-F	E	0.125	0.5	3
1.2	TDC125*050NSE-F	E	0.125	0.5	5
1.5	TDC155*050NSE-F	E	0.125	0.6	5
1.8	TDC185*050NSF-F	F	0.125	0.7	5
2.2	TDC225*050NSF-F	F	0.125	0.9	5
2.7	TDC275*050NSF-F	F	0.125	1.1	5
3.3	TDC335*050NSF-F	F	0.125	1.3	5
3.9	TDC395*050NSF-F	F	0.125	1.6	5
4.7	TDC475*050NSF-F	F	0.125	1.9	5
5.6	TDC565*050NSF-F	F	0.125	2.2	5
6.8	TDC685*050WSG-F	G	0.25	2.7	5
8.2	TDC825*050WSG-F	G	0.25	3.3	6
10	TDC106*050WSG-F	G	0.25	4.0	6
12	TDC126*050WSG-F	G	0.25	4.8	6
15	TDC156*050WSG-F	G	0.25	6.0	6
18	TDC186*050WSG-F	G	0.25	7.2	6
22	TDC226*050WSG-F	G	0.25	8.8	6

* Indicates capacitance tolerance: K = ±10%, M = ±20%, (J = ±5%, Special Order)

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

Part Numbering System

TDC	107	K	016	W	S	G	–F
Series	Capacitance	Tolerance	Voltage	Lead Spacing	Lead Length	Case Code	RoHS Compliant
TDC	**394** = 0.39 µF	**J** = ±5%	**006** = 6 Vdc	**N** = .125	**S** = .187	**E**	**–F** = Compliant
	105 = 1.0 µF	**K** = ±10%	**010** = 10 Vdc	**W** = .250	**T** = Tape & Reel	**F**	**Blank** = Not Compliant
	225 = 2.2 µF	**M** = ±20%	**016** = 16 Vdc			**G**	
	186 = 18 µF		**020** = 20 Vdc				
	107 = 100 µF		**025** = 25 Vdc				
			035 = 35 Vdc				
			050 = 50 Vdc				

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Данный компонент на территории Российской Федерации

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http://moschip.ru/get-element

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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