

# Type TAC Solid Tantalum Capacitors

## Molded, Axial Leaded Solid Tantalum Capacitors



The Type TAC molded solid tantalum capacitor is great for putting a lot of capacitance in a small space in a high temperature application. The TAC is constructed in a shock and vibration resistant, flame retardant, rugged, precision molded case that is tapered on one end for polarity identification, and it is available on tape and reel.

### Highlights

- ◆ Precision Molded
- ◆ Flame Retardant
- ◆ Tapered for Polarity Identification
- ◆ Highest CV per Case Size
- ◆ Miniature Sizes
- ◆ Highly Resistant to Shock and Vibraton

### Specifications

**Capacitance Range:** 0.10  $\mu$ F to 330  $\mu$ F  
**Voltage Range:** 6 WVdc to 50 WVdc at 85 °C  
**Tolerance:**  $\pm$ 10% Standard ( $\pm$ 5% by special order)  
**Operating Temperature Range:** -55 °C to +125 °C (with proper derating)

**Reverse Voltage:** 15% of rated voltage @ 25 °C  
 5% of rated voltage @ 85 °C  
 1% of rated voltage @ 125 °C

**Capacitance Change Maximum:** -10% @ -55 °C  
 +10% @ +85 °C  
 +12% @ +125 °C

Reel Packaging per EIA- RS-296:

Case Code	Quantity
1	4500 per 12" Reel
2	4000 per 12" Reel
5 & 6	2500 per 12" Reel
7 & 8	500 per 12" Reel

### Part Numbering System

TAC	107	K	006	P	0	7
Type	Capacitance	Tolerance	Voltage	Polar	Molded Case	Case Code
TAC	394 = 0.39 $\mu$ F 105 = 1.0 $\mu$ F 225 = 2.2 $\mu$ F 186 = 18 $\mu$ F 107 = 100 $\mu$ F	J = $\pm$ 5% K = $\pm$ 10%	006 = 6 Vdc 010 = 10 Vdc 015 = 15 dc 020 = 20 Vdc 025 = 25 Vdc 035 = 35 Vdc 050 = 50 Vdc	P = Polar	0	1 2 5 6 7 8

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## Capacitor Outline Drawing



Inches (Millimeters)

Case Code	D (Max)	L (Max)	d
1	.095 (2.41)	.260 (6.6)	.020 (.51)
2	.110 (2.79)	.290 (7.37)	.020 (.51)
5	.180 (4.57)	.345 (8.76)	.020 (.51)
6	.180 (4.57)	.420 (10.67)	.020 (.51)
7	.280 (7.11)	.530 (13.46)	.025 (.64)
8	.300 (7.62)	.710 (18.03)	.025 (.64)

## Ratings

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	Max DF % @ +25 °C 120 Hz	Catalog Part Number	Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	Max DF % @ +25 °C 120 Hz	Catalog Part Number
<b>6 WVdc @ 85 °C 4 WVdc @ 125 °C</b>					<b>10 WVdc @ 85 °C 7 WVdc @ 125 °C</b>				
3.3	1	0.5	4	TAC335K006P01	15	5	1.2	6	TAC156K010P05
3.9	1	0.5	4	TAC395K006P01	18	5	1.4	6	TAC186K010P05
4.7	1	0.5	4	TAC475K006P01	22	5	1.5	6	TAC226K010P05
5.6	2	0.5	4	TAC565K006P02	27	6	2.2	6	TAC276K010P06
6.8	2	0.5	6	TAC685K006P02	33	6	2.6	6	TAC336K010P06
8.2	2	0.5	6	TAC825K006P02	39	6	3.1	6	TAC396K010P06
10	2	0.5	6	TAC106K006P02	47	6	3.8	6	TAC476K010P06
12	2	0.6	6	TAC126K006P02	56	7	4.4	6	TAC566K010P07
15	2	0.7	6	TAC156K006P02	68	7	5.0	6	TAC686K010P07
18	5	0.9	6	TAC186K006P05	82	7	5.0	8	TAC826K010P07
22	5	1.1	6	TAC226K006P05	100	7	8.0	8	TAC107K010P07
27	5	1.3	6	TAC276K006P05	120	7	9.6	8	TAC127K010P07
33	5	1.5	6	TAC336K006P05	150	7	10.0	8	TAC157K010P07
39	6	1.9	6	TAC396K006P06	180	8	10.0	8	TAC187K010P08
47	6	2.3	6	TAC476K006P06	220	8	10.0	8	TAC227K010P08
56	6	2.7	6	TAC566K006P06	<b>15 WVdc @ 85 °C 10 WVdc @ 125 °C</b>				
68	6	3.3	6	TAC686K006P06	1.5	1	0.5	4	TAC155K015P01
82	7	3.9	8	TAC826K006P07	1.8	1	0.5	4	TAC185K015P01
100	7	4.8	8	TAC107K006P07	2.2	1	0.5	4	TAC225K015P01
120	7	5.0	8	TAC127K006P07	2.7	2	0.5	4	TAC275K015P02
150	7	5.0	8	TAC157K006P07	3.3	2	0.5	4	TAC335K015P02
180	7	8.6	8	TAC187K006P07	3.9	2	0.5	4	TAC395K015P02
220	7	10.0	8	TAC227K006P07	4.7	2	0.6	4	TAC475K015P02
270	8	10.0	8	TAC277K006P08	5.6	2	0.7	4	TAC565K015P02
330	8	10.0	8	TAC337K006P08	6.8	2	0.8	6	TAC685K015P02
<b>10 WVdc @ 85 °C 7 WVdc @ 125 °C</b>					8.2	5	1.0	6	TAC825K015P05
2.2	1	0.5	4	TAC225K010P01	10	5	1.2	6	TAC106K015P05
2.7	1	0.5	4	TAC275K010P01	12	5	1.4	6	TAC126K015P05
3.3	1	0.5	4	TAC335K010P01	15	5	1.5	6	TAC156K015P05
3.9	2	0.5	4	TAC395K010P02	18	6	2.2	6	TAC186K015P06
4.7	2	0.5	4	TAC475K010P02	22	6	2.6	6	TAC226K015P06
5.6	2	0.5	4	TAC565K010P02	27	6	3.2	6	TAC276K015P06
6.8	2	0.5	6	TAC685K010P02	33	6	4.0	6	TAC336K015P06
8.2	2	0.7	6	TAC825K010P02	39	7	4.7	6	TAC396K015P07
10	2	0.8	6	TAC106K010P02	47	7	5.0	6	TAC476K015P07
12	5	1.0	6	TAC126K010P05	56	7	6.7	6	TAC566K015P07

CDE may improve your order and shorten delivery by substituting tighter tolerance or higher voltage capacitors in the same case size.

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Cap ( $\mu$ F)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max DF % @ +25 °C 120 Hz	Catalog Part Number	Cap ( $\mu$ F)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max DF % @ +25 °C 120 Hz	Catalog Part Number
<b>15 WVdc @ 85 °C 10 WVdc @ 125 °C</b>					<b>25 WVdc @ 85 °C 17 WVdc @ 125 °C</b>				
68	7	8.2	6	TAC686K015P07	3.3	2	0.7	3	TAC335K025P02
82	7	9.8	8	TAC826K015P07	3.9	5	0.8	3	TAC395K025P05
100	7	10.0	8	TAC107K015P07	4.7	5	0.9	4	TAC475K025P05
120	8	10.0	8	TAC127K015P08	5.6	5	1.1	4	TAC565K025P05
150	8	10.0	8	TAC157K015P08	6.8	5	1.4	4	TAC685K025P05
<b>20 WVdc @ 85 °C 13 WVdc @ 125 °C</b>					<b>35 WVdc @ 85 °C 23 WVdc @ 125 °C</b>				
1	1	0.5	4	TAC105K020P01	8.2	5	1.5	4	TAC825K025P05
1.2	1	0.5	4	TAC125K020P01	10	5	1.5	4	TAC106K025P05
1.5	1	0.5	4	TAC155K020P01	12	6	2.4	4	TAC126K025P06
1.8	2	0.5	4	TAC185K020P02	15	6	3.0	4	TAC156K025P06
2.2	2	0.5	4	TAC225K020P02	18	7	3.6	6	TAC186K025P07
2.7	2	0.5	4	TAC275K020P02	22	7	4.4	6	TAC226K025P07
3.3	2	0.5	4	TAC335K020P02	27	7	5.4	6	TAC276K025P07
3.9	2	0.6	4	TAC395K020P02	33	7	6.6	6	TAC336K025P07
4.7	2	0.8	4	TAC475K020P02	39	7	7.8	6	TAC396K025P07
5.6	5	0.9	4	TAC565K020P05	47	7	9.4	6	TAC476K025P07
6.8	5	1.1	6	TAC685K020P05	56	8	10	6	TAC566K025P08
8.2	5	1.3	6	TAC825K020P05	68	8	10	6	TAC686K025P08
10	5	1.6	6	TAC106K020P05	<b>35 WVdc @ 85 °C 23 WVdc @ 125 °C</b>				
12	6	1.9	6	TAC126K020P06	0.10	1	0.5	3	TAC104K035P01
15	6	2.4	6	TAC156K020P06	0.12	1	0.5	3	TAC124K035P01
18	6	2.9	6	TAC186K020P06	0.15	1	0.5	3	TAC154K035P01
22	6	3.5	6	TAC226K020P06	0.18	1	0.5	3	TAC184K035P01
27	7	4.3	6	TAC276K020P07	0.22	1	0.5	3	TAC224K035P01
33	7	5.0	6	TAC336K020P07	0.27	1	0.5	3	TAC274K035P01
39	7	6.2	6	TAC396K020P07	0.33	1	0.5	3	TAC334K035P01
47	7	7.5	6	TAC476K020P07	0.39	1	0.5	3	TAC394K035P01
56	7	8.9	6	TAC566K020P07	0.47	1	0.5	3	TAC474K035P01
68	7	10.0	6	TAC686K020P07	0.56	2	0.5	3	TAC564K035P02
82	8	10.0	8	TAC826K020P08	0.68	2	0.5	3	TAC684K035P02
100	8	10.0	8	TAC107K020P08	0.82	2	0.5	3	TAC824K035P02
<b>25 WVdc @ 85 °C 17 WVdc @ 125 °C</b>					1.0	2	0.5	3	TAC105K035P02
0.47	1	0.5	3	TAC474K025P01	1.2	2	0.5	3	TAC125K035P02
0.56	1	0.5	3	TAC564K025P01	1.5	2	0.5	3	TAC155K035P02
0.68	1	0.5	3	TAC684K025P01	1.8	5	0.5	3	TAC185K035P05
0.82	1	0.5	3	TAC824K025P01	2.2	5	0.6	3	TAC225K035P05
1.0	1	0.5	3	TAC105K025P01	2.7	5	0.8	3	TAC275K035P05
1.2	2	0.5	3	TAC125K025P02	3.3	5	0.9	4	TAC335K035P05
1.5	2	0.5	3	TAC155K025P02	3.9	5	1.1	4	TAC395K035P05
1.8	2	0.5	3	TAC185K025P02	4.7	5	1.3	4	TAC475K035P05
2.2	2	0.5	3	TAC225K025P02	5.6	6	1.6	4	TAC565K035P06
2.7	2	0.5	3	TAC275K025P02	6.8	6	1.9	4	TAC685K035P06
					8.2	6	2.3	4	TAC825K035P06
					10	6	2.8	4	TAC106K035P06

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Cap (μF)	Case Code	Max DCL @ +25 °C (μA)	Max DF % @ +25 °C 120 Hz	Catalog Part Number
<b>35 WVdc @ 85 °C 23 WVdc @ 125 °C</b>				
12	7	3.3	4	TAC126K035P07
15	7	4.2	6	TAC156K035P07
18	7	5.0	6	TAC186K035P07
22	7	6.2	6	TAC226K035P07
27	7	7.5	6	TAC276K035P07
33	7	9.2	6	TAC336K035P07
39	8	10	6	TAC396K035P08
47	8	10	6	TAC476K035P08
<b>50 WVdc @ 85 °C 33 WVdc @ 125 °C</b>				
0.10	1	0.5	3	TAC104K050P01
0.12	1	0.5	3	TAC124K050P01
0.15	1	0.5	3	TAC154K050P01
0.18	1	0.5	3	TAC184K050P01
0.22	1	0.5	3	TAC224K050P01
0.27	1	0.5	3	TAC274K050P01
0.33	2	0.5	3	TAC334K050P02
0.39	2	0.5	3	TAC394K050P02
0.47	2	0.5	3	TAC474K050P02
0.56	2	0.5	3	TAC564K050P02

Cap (μF)	Case Code	Max DCL @ +25 °C (μA)	Max DF % @ +25 °C 120 Hz	Catalog Part Number
<b>50 WVdc @ 85 °C 33 WVdc @ 125 °C</b>				
0.68	2	0.5	3	TAC684K050P02
0.82	2	0.5	3	TAC824K050P02
1.0	2	0.5	3	TAC105K050P02
1.2	5	0.5	3	TAC125K050P05
1.5	5	0.6	4	TAC155K050P05
1.8	5	0.7	4	TAC185K050P05
2.2	5	0.9	4	TAC225K050P05
2.7	6	1.1	4	TAC275K050P06
3.3	6	1.3	4	TAC335K050P06
3.9	6	1.6	4	TAC395K050P06
4.7	6	1.9	4	TAC475K050P06
5.6	7	2.2	4	TAC565K050P07
6.8	7	2.7	4	TAC685K050P07
8.2	7	3.2	4	TAC825K050P07
10	7	4.0	6	TAC106K050P07
12	8	4.8	6	TAC126K050P08
15	8	6.0	6	TAC156K050P08
18	8	7.2	6	TAC186K050P08
22	8	8.8	6	TAC226K050P08

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