Hermetically Sealed Axial Lead Solid Tantalum Capacitors



The Type TAS solid tantalum axial lead capacitor is constructed with a rugged hermetically sealed metal case with an outer polyester insulator wrap and is ideal for use in the harsh environments of military and industrial applications. The TAS assures a small case size for high capacitance, and is frequency and temperature stable.

Highlights

- Hermetically Sealed
- High Capacitance
- Low DC Leakage
- Low Dissipation Factor
- Temperature and Frequency Stable
- Moisture & Solvent Resistant
- Miniature Size
- Long Shelf Life

Specifications

Capacitance Range: 0.0047 µF to 330 µF

Voltage Range: 6 WVdc to 100 WVdc

Capacitance Tolerance: ±10%, ±20%

Operating Temperature: –55 ºC to +125 ºC (With proper derating)

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

DC Leakage:
At +25 ºC - (See Ratings)
At +85 ºC - 10 x Ratings limit
At +125 ºC - 12.5 x Ratings limit

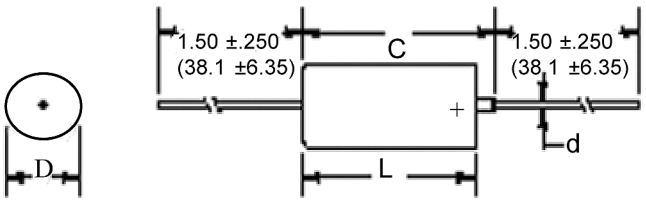
Δ Capacitance Maximum:
–10% @ –55 ºC
+8% @ +85 ºC
+12% @ +125 ºC

Maximum Power Dissipation @ 25 ºC:

Case Code	Watts
A	0.090
C	0.100
F	0.125
G	0.180

Type TAS Solid Tantalum Capacitors

Outline Drawing



Dimensions - Inches (Millimeters)							
	Uninsulated		Insulated		in. (mm)		
Case Code	D ±.005 (±.13)	L ±.031 (±.79)	D ±.010 (±.25)	L ±.031 (±.79)	C Maximum	d ±.001 (±.03)	Quantity Per Reel
A	.125(3.18)	.250(6.35)	.135(3.43)	.286(7.26)	.422 (10.72)	.020(51)	3,500
C	.175(4.45)	.438(11.13)	.185(4.70)	.474(12.04)	.610(15.49)	.020(.51)	2,500
F	.279(7.09)	.650(16.51)	.289(7.34)	.686(17.42)	.822(20.88)	.025(.64)	500
G	.341(8.66)	.750(19.05)	.351(8.92)	.786(19.96)	.922(23.42)	.025(.64)	400

Part Numbering System

TAS	474	M	035	P	1	A	-F
Series	Capacitance	Tolerance	Voltage	Polar	Mylar Sleeve	Case Code	RoHS Compliant
TAS	**472** = 0.0047 µF	**J** = ±5%	**006** = 6 Vdc	**P =** Polar	**1**	**A**	
	474 = 0.47 µF	**K** = ±10%	**035** = 35 Vdc			**C**	
	105 = 1.0 µF	**M** = ±20%	**100** = 100 Vdc			**F**	
	225 = 2.2 µF					**G**	
	106 = 10.0 µF						

Ratings

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
6 WVdc @ 85 °C 4 WVdc @ 125 °C				
2.2	A	0.3	4	TAS225K006P1A-F
2.7	A	0.3	4	TAS275K006P1A-F
3.3	A	0.3	4	TAS335K006P1A-F
3.9	A	0.3	4	TAS395K006P1A-F
4.7	A	0.3	4	TAS475K006P1A-F
5.6	A	0.3	4	TAS565K006P1A-F
6.8	A	0.3	6	TAS685K006P1A-F
8.2	C	0.3	6	TAS825K006P1C-F
10	C	0.3	6	TAS106K006P1C-F
12	C	0.5	6	TAS126K006P1C-F
15	C	0.9	6	TAS156K006P1C-F
18	C	0.9	6	TAS186K006P1C-F
22	C	0.9	6	TAS226K006P1C-F
27	C	0.9	6	TAS276K006P1C-F
33	C	0.9	6	TAS336K006P1C-F
39	C	0.9	6	TAS396K006P1C-F
47	C	1.5	6	TAS476K006P1C-F
56	C	1.5	6	TAS566K006P1C-F
68	F	3.0	6	TAS686K006P1F-F
100	F	3.0	6	TAS107K006P1F-F
120	F	3.0	6	TAS127K006P1F-F
150	F	4.5	6	TAS157K006P1F-F
180	F	5.5	6	TAS187K006P1F-F
220	G	6.0	8	TAS227K006P1G-F
270	G	6.0	8	TAS277K006P1G-F
330	G	7.5	8	TAS337K006P1G-F

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
10 WVdc @ 85 °C 7 WVdc @ 125 °C				
1.0	A	0.3	3	TAS105K010P1A-F
1.2	A	0.3	4	TAS125K010P1A-F
1.5	A	0.3	4	TAS155K010P1A-F
1.8	A	0.3	4	TAS185K010P1A-F
2.2	A	0.3	4	TAS225K010P1A-F
2.7	A	0.3	4	TAS275K010P1A-F
3.3	A	0.3	4	TAS335K010P1A-F
3.9	A	0.3	4	TAS395K010P1A-F
4.7	A	0.4	4	TAS475K010P1A-F
5.6	C	0.4	4	TAS565K010P1C-F
6.8	C	1.0	6	TAS685K010P1C-F
8.2	C	1.0	6	TAS825K010P1C-F
10	C	1.0	6	TAS106K010P1C-F
12	C	1.0	6	TAS126K010P1C-F
15	C	1.0	6	TAS156K010P1C-F
18	C	1.0	6	TAS186K010P1C-F
22	C	2.0	6	TAS226K010P1C-F
27	C	2.0	6	TAS276K010P1C-F
33	C	2.0	6	TAS336K010P1C-F
39	C	2.0	6	TAS396K010P1C-F
47	F	3.0	6	TAS476K010P1F-F
56	F	3.0	6	TAS566K010P1F-F
68	F	3.0	6	TAS686K010P1F-F
100	F	5.0	6	TAS107K010P1F-F
120	F	5.0	6	TAS127K010P1F-F
150	G	9.0	6	TAS157K010P1G-F
180	G	9.0	6	TAS187K010P1G-F
220	G	10.0	8	TAS227K010P1G-F

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
15 WVdc @ 85 °C 10 WVdc @ 125 °C				
0.39	A	0.3	3	TAS394K015P1A-F
0.47	A	0.3	3	TAS474K015P1A-F
0.56	A	0.3	3	TAS564K015P1A-F
0.68	A	0.3	3	TAS684K015P1A-F
0.82	A	0.3	3	TAS824K015P1A-F
1.0	A	0.3	3	TAS105K015P1A-F
1.2	A	0.3	4	TAS125K015P1A-F
1.5	A	0.3	4	TAS155K015P1A-F
1.8	A	0.3	4	TAS185K015P1A-F
2.2	A	0.3	4	TAS225K015P1A-F
2.7	A	0.3	4	TAS275K015P1A-F
3.3	A	0.4	4	TAS335K015P1A-F
3.9	C	0.4	4	TAS395K015P1C-F
4.7	C	0.7	4	TAS475K015P1C-F
5.6	C	0.7	4	TAS565K015P1C-F
6.8	C	0.7	6	TAS685K015P1C-F
8.2	C	0.7	6	TAS825K015P1C-F
10	C	1	6	TAS106K015P1C-F
12	C	1	6	TAS126K015P1C-F
15	C	2	6	TAS156K015P1C-F
18	C	2	6	TAS186K015P1C-F
22	C	2	6	TAS226K015P1C-F
27	F	3	6	TAS276K015P1F-F
33	F	3	6	TAS336K015P1F-F
39	F	3	6	TAS396K015P1F-F
47	F	4	6	TAS476K015P1F-F
56	F	4	6	TAS566K015P1F-F
68	F	5	6	TAS686K015P1F-F
82	G	6	6	TAS826K015P1G-F
100	G	6	6	TAS107K015P1G-F
120	G	6	6	TAS127K015P1G-F
150	G	8	6	TAS157K015P1G-F
20 WVdc @ 85 °C 13 WVdc @ 125 °C				
0.047	A	0.1	3	TAS473K020P1A-F
0.056	A	0.1	3	TAS563K020P1A-F
0.068	A	0.1	3	TAS683K020P1A-F
0.082	A	0.1	3	TAS823K020P1A-F
0.10	A	0.3	3	TAS104K020P1A-F
0.12	A	0.3	3	TAS124K020P1A-F
0.15	A	0.3	3	TAS154K020P1A-F
0.18	A	0.3	3	TAS184K020P1A-F
0.22	A	0.3	3	TAS224K020P1A-F
0.27	A	0.3	3	TAS274K020P1A-F

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
20 WVdc @ 85 °C 13 WVdc @ 125 °C				
0.39	A	0.3	3	TAS394K020P1A-F
0.47	A	0.3	3	TAS474K020P1A-F
0.56	A	0.3	3	TAS564K020P1A-F
0.68	A	0.3	3	TAS684K020P1A-F
0.82	A	0.3	3	TAS824K020P1A-F
1.0	A	0.3	3	TAS105K020P1A-F
1.2	A	0.3	4	TAS125K020P1A-F
1.5	A	0.3	4	TAS155K020P1A-F
1.8	A	0.3	4	TAS185K020P1A-F
2.2	A	0.4	4	TAS225K020P1A-F
2.7	C	0.5	4	TAS275K020P1C-F
3.3	C	1.0	4	TAS335K020P1C-F
3.9	C	1.0	4	TAS395K020P1C-F
4.7	C	1.0	4	TAS475K020P1C-F
5.6	C	1.0	4	TAS565K020P1C-F
6.8	C	1.0	6	TAS685K020P1C-F
8.2	C	1.0	6	TAS825K020P1C-F
10	C	1.0	6	TAS106K020P1C-F
12	C	1.0	6	TAS126K020P1C-F
15	C	2.0	6	TAS156K020P1C-F
18	F	2.0	6	TAS186K020P1F-F
22	F	2.5	6	TAS226K020P1F-F
27	F	2.5	6	TAS276K020P1F-F
33	F	3.0	6	TAS336K020P1F-F
39	F	3.0	6	TAS396K020P1F-F
47	F	4.5	6	TAS476K020P1F-F
56	G	5.5	6	TAS566K020P1G-F
68	G	6.0	6	TAS686K020P1G-F
82	G	6.0	6	TAS826K020P1G-F
100	G	10.0	6	TAS107K020P1G-F
35 WVdc @ 85 °C 23 WVdc @ 125 °C				
0.0047	A	0.1	3	TAS472K035P1A-F
0.0056	A	0.1	3	TAS562K035P1A-F
0.0068	A	0.1	3	TAS682K035P1A-F
0.0082	A	0.1	3	TAS822K035P1A-F
0.01	A	0.1	3	TAS103K035P1A-F
0.012	A	0.1	3	TAS123K035P1A-F
0.015	A	0.1	3	TAS153K035P1A-F
0.018	A	0.1	3	TAS183K035P1A-F
0.022	A	0.1	3	TAS223K035P1A-F
0.027	A	0.1	3	TAS273K035P1A-F

Type TAS Solid Tantalum Capacitors

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
35 WVdc @ 85 °C 23 WVdc @ 125 °C				
0.033	A	0.1	3	TAS333K035P1A-F
0.039	A	0.1	3	TAS393K035P1A-F
0.047	A	0.1	3	TAS473K035P1A-F
0.056	A	0.1	3	TAS563K035P1A-F
0.068	A	0.1	3	TAS683K035P1A-F
0.082	A	0.1	3	TAS823K035P1A-F
0.10	A	0.5	3	TAS104K035P1A-F
0.12	A	0.5	3	TAS124K035P1A-F
0.15	A	0.5	3	TAS154K035P1A-F
0.18	A	0.5	3	TAS184K035P1A-F
0.22	A	0.5	3	TAS224K035P1A-F
0.27	A	0.5	3	TAS274K035P1A-F
0.39	A	0.5	3	TAS394K035P1A-F
0.47	A	0.5	3	TAS474K035P1A-F
0.56	A	0.5	3	TAS564K035P1A-F
0.68	A	0.5	3	TAS684K035P1A-F
0.82	A	0.5	3	TAS824K035P1A-F
1.0	A	0.5	3	TAS105K035P1A-F
1.2	C	0.5	4	TAS125K035P1C-F
1.5	C	0.5	4	TAS155K035P1C-F
1.8	C	0.5	4	TAS185K035P1C-F
2.2	C	1.0	4	TAS225K035P1C-F
2.7	C	1.0	4	TAS275K035P1C-F
3.3	C	1.0	4	TAS335K035P1C-F
3.9	C	1.0	4	TAS395K035P1C-F
4.7	C	1.0	4	TAS475K035P1C-F
5.6	C	1.0	4	TAS565K035P1C-F
6.8	C	1.5	4	TAS685K035P1C-F
8.2	F	3.0	4	TAS825K035P1F-F
10	F	3.0	4	TAS106K035P1F-F
12	F	3.0	4	TAS126K035P1F-F
15	F	3.0	4	TAS156K035P1F-F
18	F	3.0	4	TAS186K035P1F-F
22	F	4.0	4	TAS226K035P1F-F
27	G	4.5	4	TAS276K035P1G-F
33	G	5.5	4	TAS336K035P1G-F
39	G	6.0	4	TAS396K035P1G-F
47	G	8.0	4	TAS476K035P1G-F
50 WVdc @ 85 °C 33 WVdc @ 125 °C				
0.0047	A	0.1	2	TAS472K050P1A-F
0.0056	A	0.1	2	TAS562K050P1A-F
0.0068	A	0.1	2	TAS682K050P1A-F
0.0082	A	0.1	2	TAS822K050P1A-F
0.01	A	0.1	2	TAS103K050P1A-F

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
50 WVdc @ 85 °C 33 WVdc @ 125 °C				
0.012	A	0.1	2	TAS123K050P1A-F
0.015	A	0.1	2	TAS153K050P1A-F
0.018	A	0.1	2	TAS183K050P1A-F
0.022	A	0.1	2	TAS223K050P1A-F
0.027	A	0.1	2	TAS273K050P1A-F
0.033	A	0.1	2	TAS333K050P1A-F
0.039	A	0.1	2	TAS393K050P1A-F
0.047	A	0.1	2	TAS473K050P1A-F
0.056	A	0.1	2	TAS563K050P1A-F
0.068	A	0.1	2	TAS683K050P1A-F
0.082	A	0.1	2	TAS823K050P1A-F
0.10	A	0.3	2	TAS104K050P1A-F
0.12	A	0.3	2	TAS124K050P1A-F
0.15	A	0.3	2	TAS154K050P1A-F
0.18	A	0.3	2	TAS184K050P1A-F
0.22	A	0.3	2	TAS224K050P1A-F
0.27	A	0.3	2	TAS274K050P1A-F
0.39	A	0.3	2	TAS394K050P1A-F
0.47	A	0.3	2	TAS474K050P1A-F
0.56	A	0.3	2	TAS564K050P1A-F
0.68	A	0.3	2	TAS684K050P1A-F
0.82	A	0.3	2	TAS824K050P1A-F
1.0	A	0.4	2	TAS105K050P1A-F
1.2	C	0.4	4	TAS125K050P1C-F
1.5	C	0.5	4	TAS155K050P1C-F
1.8	C	0.5	4	TAS185K050P1C-F
2.2	C	0.8	4	TAS225K050P1C-F
2.7	C	0.8	4	TAS275K050P1C-F
3.3	C	1.2	4	TAS335K050P1C-F
3.9	C	1.5	4	TAS395K050P1C-F
4.7	C	1.7	4	TAS475K050P1C-F
5.6	F	2.2	4	TAS565K050P1F-F
6.8	F	2.2	4	TAS685K050P1F-F
8.2	F	2.5	4	TAS825K050P1F-F
10	F	2.5	4	TAS106K050P1F-F
12	F	3.0	4	TAS126K050P1F-F
15	F	4.0	4	TAS156K050P1F-F
18	F	4.5	4	TAS186K050P1F-F
22	G	5.5	4	TAS226K050P1G-F
75 WVdc @ 85 °C 50 WVdc @ 125 °C				
0.0047	A	0.3	2	TAS472K075P1A-F
0.0056	A	0.3	2	TAS562K075P1A-F
0.0068	A	0.3	2	TAS682K075P1A-F
0.0082	A	0.3	2	TAS822K075P1A-F
0.01	A	0.3	2	TAS103K075P1A-F

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
75 WVdc @ 85 °C 50 WVdc @ 125 °C				
0.012	A	0.3	2	TAS123K075P1A-F
0.015	A	0.3	2	TAS153K075P1A-F
0.018	A	0.3	2	TAS183K075P1A-F
0.022	A	0.3	2	TAS223K075P1A-F
0.027	A	0.3	2	TAS273K075P1A-F
0.033	A	0.3	2	TAS333K075P1A-F
0.039	A	0.3	2	TAS393K075P1A-F
0.047	A	0.3	2	TAS473K075P1A-F
0.056	A	0.3	2	TAS563K075P1A-F
0.068	A	0.3	2	TAS683K075P1A-F
0.082	A	0.3	2	TAS823K075P1A-F
0.10	A	0.3	2	TAS104K075P1A-F
0.12	A	0.3	2	TAS124K075P1A-F
0.15	A	0.3	2	TAS154K075P1A-F
0.18	A	0.3	2	TAS184K075P1A-F
0.22	A	0.3	2	TAS224K075P1A-F
0.27	A	0.3	2	TAS274K075P1A-F
0.33	A	0.3	2	TAS334K075P1A-F
0.39	A	0.3	2	TAS394K075P1A-F
0.47	A	0.3	2	TAS474K075P1A-F
0.56	A	0.3	2	TAS564K075P1A-F
0.68	A	0.3	2	TAS684K075P1A-F
0.82	C	0.3	2	TAS824K075P1C-F
1.0	C	0.3	2	TAS105K075P1C-F
1.2	C	0.3	4	TAS125K075P1C-F
1.5	C	0.6	4	TAS155K075P1C-F
1.8	C	0.7	4	TAS185K075P1C-F
2.2	C	0.8	4	TAS225K075P1C-F
2.7	C	1.0	4	TAS275K075P1C-F
3.3	C	1.2	4	TAS335K075P1C-F
3.9	C	1.5	4	TAS395K075P1C-F
4.7	F	3.0	4	TAS475K075P1F-F
5.6	F	3.0	4	TAS565K075P1F-F
6.8	F	5.0	4	TAS685K075P1F-F
8.2	F	5.0	4	TAS825K075P1F-F
10.0	F	5.0	4	TAS106K075P1F-F
12.0	G	5.0	4	TAS126K075P1G-F
15.0	G	7.0	4	TAS156K075P1G-F

Cap (µF)	Case Code	Max DCL @ +25 °C (µA)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
100 WVdc @ 85 °C 67 WVdc @ 125 °C				
0.0047	A	0.3	2	TAS472K100P1A-F
0.0056	A	0.3	2	TAS562K100P1A-F
0.0068	A	0.3	2	TAS682K100P1A-F
0.0082	A	0.3	2	TAS822K100P1A-F
0.010	A	0.3	2	TAS103K100P1A-F
0.012	A	0.3	2	TAS123K100P1A-F
0.015	A	0.3	2	TAS153K100P1A-F
0.018	A	0.3	2	TAS183K100P1A-F
0.022	A	0.3	2	TAS223K100P1A-F
0.027	A	0.3	2	TAS273K100P1A-F
0.033	A	0.3	2	TAS333K100P1A-F
0.039	A	0.3	2	TAS393K100P1A-F
0.047	A	0.3	2	TAS473K100P1A-F
0.056	A	0.3	2	TAS563K100P1A-F
0.068	A	0.3	2	TAS683K100P1A-F
0.082	A	0.3	2	TAS823K100P1A-F
0.10	A	0.3	2	TAS104K100P1A-F
0.12	A	0.3	2	TAS124K100P1A-F
0.15	A	0.3	2	TAS154K100P1A-F
0.18	A	0.3	2	TAS184K100P1A-F
0.22	A	0.3	2	TAS224K100P1A-F
0.27	A	0.3	2	TAS274K100P1A-F
0.33	A	0.3	2	TAS334K100P1A-F
0.39	A	0.3	2	TAS394K100P1A-F
0.47	A	0.3	2	TAS474K100P1A-F
0.56	A	0.3	2	TAS564K100P1A-F
0.68	C	0.3	2	TAS684K100P1C-F
0.82	C	0.4	2	TAS824K100P1C-F
1.0	C	0.5	2	TAS105K100P1C-F
1.2	C	0.5	3	TAS125K100P1C-F
1.5	C	0.7	3	TAS155K100P1C-F
1.8	C	0.7	3	TAS185K100P1C-F
2.2	C	0.9	3	TAS225K100P1C-F
2.7	C	1.1	3	TAS275K100P1C-F
3.3	F	1.5	3	TAS335K100P1F-F
3.9	F	1.5	3	TAS395K100P1F-F
4.7	F	2.5	3	TAS475K100P1F-F
5.6	F	2.5	3	TAS565K100P1F-F
6.8	F	2.5	3	TAS685K100P1F-F
8.2	G	5.0	3	TAS825K100P1G-F
10.0	G	5.0	3	TAS106K100P1G-F

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