

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 μ F to 330 μ F

Voltage Range: 6 WVdc to 100 WVdc

Capacitance Tolerance: $\pm 10\%$, $\pm 20\%$

Operating Temperature: -55°C to $+125^{\circ}\text{C}$ (With proper derating)

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

DC Leakage: At $+25^{\circ}\text{C}$ - (See Ratings)
At $+85^{\circ}\text{C}$ - 10 x Ratings limit
At $+125^{\circ}\text{C}$ - 12.5 x Ratings limit

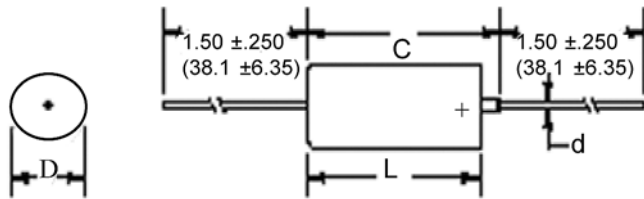
Δ Capacitance Maximum: -10% @ -55°C
 $+8\%$ @ $+85^{\circ}\text{C}$
 $+12\%$ @ $+125^{\circ}\text{C}$

Maximum Power Dissipation @ 25°C :

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)							
Case Code	Uninsulated		Insulated		in. (mm)		
	D	L	D	L	C	d	Quantity
	$\pm.005$ ($\pm.13$)	$\pm.031$ ($\pm.79$)	$\pm.010$ ($\pm.25$)	$\pm.031$ ($\pm.79$)	Maximum	$\pm.001$ ($\pm.03$)	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
Series	Capacitance	Tolerance	Voltage	Polar	Mylar Sleeve	Case Code
TAS	472 = 0.0047 μ F	J = $\pm 5\%$	006 = 6 Vdc	P = Polar	1	A
	474 = 0.47 μ F	K = $\pm 10\%$	035 = 35 Vdc			C
	105 = 1.0 μ F	M = $\pm 20\%$	100 = 100 Vdc			F
	225 = 2.2 μ F					G
	106 = 10.0 μ F					

Ratings

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

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

Type TAS Solid Tantalum Capacitors

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

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

Type TAS Solid Tantalum Capacitors

Cap (μ F)	Case Code	Max DCL @ +25 °C (μ A)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number	Cap (μ F)	Case Code	Max DCL @ +25 °C (μ A)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
35 WVdc @ 85 °C 23 WVdc @ 125 °C					50 WVdc @ 85 °C 33 WVdc @ 125 °C				
0.033	A	0.1	3	TAS333K035P1A	0.012	A	0.1	2	TAS123K050P1A
0.039	A	0.1	3	TAS393K035P1A	0.015	A	0.1	2	TAS153K050P1A
0.047	A	0.1	3	TAS473K035P1A	0.018	A	0.1	2	TAS183K050P1A
0.056	A	0.1	3	TAS563K035P1A	0.022	A	0.1	2	TAS223K050P1A
0.068	A	0.1	3	TAS683K035P1A	0.027	A	0.1	2	TAS273K050P1A
0.082	A	0.1	3	TAS823K035P1A	0.033	A	0.1	2	TAS333K050P1A
0.10	A	0.5	3	TAS104K035P1A	0.039	A	0.1	2	TAS393K050P1A
0.12	A	0.5	3	TAS124K035P1A	0.047	A	0.1	2	TAS473K050P1A
0.15	A	0.5	3	TAS154K035P1A	0.056	A	0.1	2	TAS563K050P1A
0.18	A	0.5	3	TAS184K035P1A	0.068	A	0.1	2	TAS683K050P1A
0.22	A	0.5	3	TAS224K035P1A	0.082	A	0.1	2	TAS823K050P1A
0.27	A	0.5	3	TAS274K035P1A	0.10	A	0.3	2	TAS104K050P1A
0.39	A	0.5	3	TAS394K035P1A	0.12	A	0.3	2	TAS124K050P1A
0.47	A	0.5	3	TAS474K035P1A	0.15	A	0.3	2	TAS154K050P1A
0.56	A	0.5	3	TAS564K035P1A	0.18	A	0.3	2	TAS184K050P1A
0.68	A	0.5	3	TAS684K035P1A	0.22	A	0.3	2	TAS224K050P1A
0.82	A	0.5	3	TAS824K035P1A	0.27	A	0.3	2	TAS274K050P1A
1.0	A	0.5	3	TAS105K035P1A	0.39	A	0.3	2	TAS394K050P1A
1.2	C	0.5	4	TAS125K035P1C	0.47	A	0.3	2	TAS474K050P1A
1.5	C	0.5	4	TAS155K035P1C	0.56	A	0.3	2	TAS564K050P1A
1.8	C	0.5	4	TAS185K035P1C	0.68	A	0.3	2	TAS684K050P1A
2.2	C	1.0	4	TAS225K035P1C	0.82	A	0.3	2	TAS824K050P1A
2.7	C	1.0	4	TAS275K035P1C	1.0	A	0.4	2	TAS105K050P1A
3.3	C	1.0	4	TAS335K035P1C	1.2	C	0.4	4	TAS125K050P1C
3.9	C	1.0	4	TAS395K035P1C	1.5	C	0.5	4	TAS155K050P1C
4.7	C	1.0	4	TAS475K035P1C	1.8	C	0.5	4	TAS185K050P1C
5.6	C	1.0	4	TAS565K035P1C	2.2	C	0.8	4	TAS225K050P1C
6.8	C	1.5	4	TAS685K035P1C	2.7	C	0.8	4	TAS275K050P1C
8.2	F	3.0	4	TAS825K035P1F	3.3	C	1.2	4	TAS335K050P1C
10	F	3.0	4	TAS106K035P1F	3.9	C	1.5	4	TAS395K050P1C
12	F	3.0	4	TAS126K035P1F	4.7	C	1.7	4	TAS475K050P1C
15	F	3.0	4	TAS156K035P1F	5.6	F	2.2	4	TAS565K050P1F
18	F	3.0	4	TAS186K035P1F	6.8	F	2.2	4	TAS685K050P1F
22	F	4.0	4	TAS226K035P1F	8.2	F	2.5	4	TAS825K050P1F
27	G	4.5	4	TAS276K035P1G	10	F	2.5	4	TAS106K050P1F
33	G	5.5	4	TAS336K035P1G	12	F	3.0	4	TAS126K050P1F
39	G	6.0	4	TAS396K035P1G	15	F	4.0	4	TAS156K050P1F
47	G	8.0	4	TAS476K035P1G	18	F	4.5	4	TAS186K050P1F
50 WVdc @ 85 °C 33 WVdc @ 125 °C					75 WVdc @ 85 °C 50 WVdc @ 125 °C				
0.0047	A	0.1	2	TAS472K050P1A	0.0047	A	0.3	2	TAS472K075P1A
0.0056	A	0.1	2	TAS562K050P1A	0.0056	A	0.3	2	TAS562K075P1A
0.0068	A	0.1	2	TAS682K050P1A	0.0068	A	0.3	2	TAS682K075P1A
0.0082	A	0.1	2	TAS822K050P1A	0.0082	A	0.3	2	TAS822K075P1A
0.01	A	0.1	2	TAS103K050P1A	0.01	A	0.3	2	TAS103K075P1A

Type TAS Solid Tantalum Capacitors

Cap (μ F)	Case Code	Max DCL @ +25 °C (μ A)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number	Cap (μ F)	Case Code	Max DCL @ +25 °C (μ A)	DF Max @ +25 °C 120 Hz (%)	Catalog Part Number
75 WVdc @ 85 °C 50 WVdc @ 125 °C					100 WVdc @ 85 °C 67 WVdc @ 125 °C				
0.012	A	0.3	2	TAS123K075P1A	0.0047	A	0.3	2	TAS472K100P1A
0.015	A	0.3	2	TAS153K075P1A	0.0056	A	0.3	2	TAS562K100P1A
0.018	A	0.3	2	TAS183K075P1A	0.0068	A	0.3	2	TAS682K100P1A
0.022	A	0.3	2	TAS223K075P1A	0.0082	A	0.3	2	TAS822K100P1A
0.027	A	0.3	2	TAS273K075P1A	0.010	A	0.3	2	TAS103K100P1A
0.033	A	0.3	2	TAS333K075P1A	0.012	A	0.3	2	TAS123K100P1A
0.039	A	0.3	2	TAS393K075P1A	0.015	A	0.3	2	TAS153K100P1A
0.047	A	0.3	2	TAS473K075P1A	0.018	A	0.3	2	TAS183K100P1A
0.056	A	0.3	2	TAS563K075P1A	0.022	A	0.3	2	TAS223K100P1A
0.068	A	0.3	2	TAS683K075P1A	0.027	A	0.3	2	TAS273K100P1A
0.082	A	0.3	2	TAS823K075P1A	0.033	A	0.3	2	TAS333K100P1A
0.10	A	0.3	2	TAS104K075P1A	0.039	A	0.3	2	TAS393K100P1A
0.12	A	0.3	2	TAS124K075P1A	0.047	A	0.3	2	TAS473K100P1A
0.15	A	0.3	2	TAS154K075P1A	0.056	A	0.3	2	TAS563K100P1A
0.18	A	0.3	2	TAS184K075P1A	0.068	A	0.3	2	TAS683K100P1A
0.22	A	0.3	2	TAS224K075P1A	0.082	A	0.3	2	TAS823K100P1A
0.27	A	0.3	2	TAS274K075P1A	0.10	A	0.3	2	TAS104K100P1A
0.33	A	0.3	2	TAS334K075P1A	0.12	A	0.3	2	TAS124K100P1A
0.39	A	0.3	2	TAS394K075P1A	0.15	A	0.3	2	TAS154K100P1A
0.47	A	0.3	2	TAS474K075P1A	0.18	A	0.3	2	TAS184K100P1A
0.56	A	0.3	2	TAS564K075P1A	0.22	A	0.3	2	TAS224K100P1A
0.68	A	0.3	2	TAS684K075P1A	0.27	A	0.3	2	TAS274K100P1A
0.82	C	0.3	2	TAS824K075P1C	0.33	A	0.3	2	TAS334K100P1A
1.0	C	0.3	2	TAS105K075P1C	0.39	A	0.3	2	TAS394K100P1A
1.2	C	0.3	4	TAS125K075P1C	0.47	A	0.3	2	TAS474K100P1A
1.5	C	0.6	4	TAS155K075P1C	0.56	A	0.3	2	TAS564K100P1A
1.8	C	0.7	4	TAS185K075P1C	0.68	C	0.3	2	TAS684K100P1C
2.2	C	0.8	4	TAS225K075P1C	0.82	C	0.4	2	TAS824K100P1C
2.7	C	1.0	4	TAS275K075P1C	1.0	C	0.5	2	TAS105K100P1C
3.3	C	1.2	4	TAS335K075P1C	1.2	C	0.5	3	TAS125K100P1C
3.9	C	1.5	4	TAS395K075P1C	1.5	C	0.7	3	TAS155K100P1C
4.7	F	3.0	4	TAS475K075P1F	1.8	C	0.7	3	TAS185K100P1C
5.6	F	3.0	4	TAS565K075P1F	2.2	C	0.9	3	TAS225K100P1C
6.8	F	5.0	4	TAS685K075P1F	2.7	C	1.1	3	TAS275K100P1C
8.2	F	5.0	4	TAS825K075P1F	3.3	F	1.5	3	TAS335K100P1F
10.0	F	5.0	4	TAS106K075P1F	3.9	F	1.5	3	TAS395K100P1F
12.0	G	5.0	4	TAS126K075P1G	4.7	F	2.5	3	TAS475K100P1F
15.0	G	7.0	4	TAS156K075P1G	5.6	F	2.5	3	TAS565K100P1F
					6.8	F	2.5	3	TAS685K100P1F
					8.2	G	5.0	3	TAS825K100P1G
					10.0	G	5.0	3	TAS106K100P1G

Type TAS Solid Tantalum Capacitors

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.