

# Type TXA Solid Tantalum Capacitors

## Hermetically Sealed Axial Lead Solid Tantalum Capacitors



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

### Highlights

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

### Specifications

**Capacitance Range:** 1.2  $\mu\text{F}$  to 1000  $\mu\text{F}$

**Voltage Range:** 6 WVdc to 50 WVdc @ 85 °C

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

**Operating Temperature:**  $-55\text{ }^\circ\text{C}$  to  $+125\text{ }^\circ\text{C}$  ( 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  $+25\text{ }^\circ\text{C}$  - (See Ratings)  
At  $+85\text{ }^\circ\text{C}$  - 10 x Ratings limit  
At  $+125\text{ }^\circ\text{C}$  - 12.5 x Ratings limit

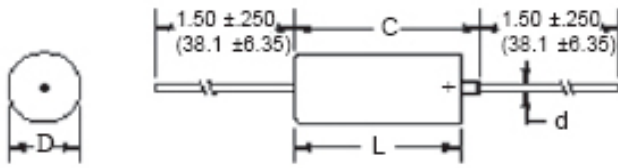
**Capacitance Change Maximum:**  $-10\%$  @  $-55\text{ }^\circ\text{C}$   
 $+8\%$  @  $+85\text{ }^\circ\text{C}$   
 $+12\%$  @  $+125\text{ }^\circ\text{C}$

**Maximum Power Dissipation @ 25 °C:**

Case Code	Watts
A	0.090
C	0.100
F	0.125
G	0.180

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## Outline Drawing



Case Code	Uninsulated		Insulated		Inches (mm)		Quantity Per Reel
	D ±.005 (±.13)	L ±.031 (±.79)	D ±.010 (±.25)	L ±.031 (±.79)	C Maximum	d ±.001 (±.03)	
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 Sys-

TXA	186	M	020	P	1	C
Type	Capacitance	Tolerance	Voltage	Polar	Mylar Sleeve	Case Code
TXA	105 = 1.0 $\mu$ F 225 = 2.2 $\mu$ F 186 = 18.6 $\mu$ F	J = $\pm$ 5% K = $\pm$ 10% M = $\pm$ 20%	006 = 6 Vdc 020 = 20 Vdc 050 = 50 Vdc	P = Polar	1	A C F

## Ratings

Cap ( $\mu$ F)	Catalog Part Number	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max DF % @ +25 °C 120 Hz
<b>6 WVdc @ 85 °C 4 WVdc @ 125 °C</b>				
8.2	TXA825K006P1A	A	0.9	6
10	TXA106K006P1A	A	0.9	6
12	TXA126K006P1A	A	1.0	6
82	TXA826K006P1C	C	3.0	6
100	TXA107K006P1C	C	6.0	6
220	TXA227K006P1F	F	10	8
270	TXA277K006P1F	F	10	8
330	TXA337K006P1F	F	10	8
390	TXA397K006P1F	F	10	10
470	TXA477K006P1F	F	10	10
560	TXA567K006P1G	G	20	10
680	TXA687K006P1G	G	20	10
820	TXA827K006P1G	G	20	10
1000	TXA108K006P1G	G	20	10
<b>10 WVdc @ 85 °C 7 WVdc @ 125 °C</b>				
5.6	TXA565K010P1A	A	1.0	4
6.8	TXA685K010P1A	A	1.0	6
8.2	TXA825K010P1A	A	1.2	6
47	TXA476K010P1C	C	4.0	6
56	TXA566K010P1C	C	5.0	6
68	TXA686K010P1C	C	6.0	6
82	TXA826K010P1C	C	7.0	6
150	TXA157K010P1F	F	8.0	8
180	TXA187K010P1F	F	8.0	8
220	TXA227K010P1F	F	13	8

Cap ( $\mu$ F)	Catalog Part Number	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max DF % @ +25 °C 120 Hz
<b>10 WVdc @ 85 °C 7 WVdc @ 125 °C</b>				
270	TXA277K010P1F	F	13	8
330	TXA337K010P1G	G	16	8
390	TXA397K010P1G	G	16	10
470	TXA477K010P1G	G	16	10
560	TXA567K010P1G	G	20	10
<b>15 WVdc @ 85 °C 10 WVdc @ 125 °C</b>				
3.9	TXA395K015P1A	A	1.0	4
4.7	TXA475K015P1A	A	1.0	4
5.6	TXA565K015P1A	A	1.3	4
27	TXA276K015P1C	C	3.0	6
33	TXA336K015P1C	C	5.0	6
39	TXA396K015P1C	C	5.0	6
82	TXA826K015P1F	F	8.0	6
100	TXA107K015P1F	F	10	6
120	TXA127K015P1F	F	10	6
150	TXA157K015P1F	F	15	8
180	TXA187K015P1F	F	15	8
220	TXA227K015P1G	G	20	8
270	TXA277K015P1G	G	20	8
330	TXA337K015P1G	G	20	8

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## Ratings

Cap ( $\mu$ F)	Catalog Part Number	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max DF % @ +25 °C 120 Hz
<b>20 WVdc @ 85 °C</b> <b>13 WVdc @ 125 °C</b>				
2.7	TXA275K020P1A	A	0.8	4
3.3	TXA335020P1A	A	1.0	4
3.9	TXA395K020P1A	A	1.2	4
4.7	TXA475K020P1A	A	1.2	4
18	TXA186K020P1C	C	3.0	6
22	TXA226K020P1C	C	3.0	6
27	TXA276K020P1C	C	4.0	6
56	TXA566K020P1F	F	7.0	6
68	TXA686K020P1F	F	8.0	6
82	TXA826K020P1F	F	10	6
100	TXA107K020P1F	F	12	6
120	TXA127K020P1F	F	12	6
150	TXA157K020P1G	G	15	8
180	TXA187K020P1G	G	15	8
<b>30 WVdc @ 85 °C</b> <b>20 WVdc @ 125 °C</b>				
1.8	TXA185K030P1A	A	1	4
2.2	TXA225K030P1A	A	1	4
2.7	TXA275K030P1A	A	1	4
12	TXA126K030P1C	C	3	4
15	TXA156K030P1C	C	3	4
18	TXA186K030P1C	C	3	4
33	TXA336K030P1F	F	6	6
39	TXA396K030P1F	F	6	6
47	TXA476K030P1F	F	7	6
56	TXA566K030P1F	F	7	6
68	TXA686K030P1F	F	7	6
100	TXA107K030P1G	G	10	8

Cap ( $\mu$ F)	Catalog Part Number	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max DF % @ +25 °C 120 Hz
<b>35 WVdc @ 85 °C</b> <b>23 WVdc @ 125 °C</b>				
1.5	TXA155K035P1A	A	0.8	4
1.8	TXA185035P1A	A	1	4
8.2	TXA825K035P1C	C	3	4
10	TXA106K035P1C	C	3	4
27	TXA276K035P1F	F	7	6
33	TXA336K035P1F	F	8	6
39	TXA396K035P1F	F	10	6
47	TXA476K035P1F	F	10	6
56	TXA566K035P1G	G	12	6
68	TXA686K035P1G	G	12	6
<b>50 WVdc @ 85 °C</b> <b>33 WVdc @ 125 °C</b>				
1.2	TXA125K050P1A	A	0.6	4
1.5	TXA155K050P1A	A	0.8	4
5.6	TXA565K050P1C	C	2.5	4
6.8	TXA685K050P1C	C	2.5	4
22	TXA226K050P1F	F	7	6
27	TXA276K050P1F	F	8	6
33	TXA336K050P1G	G	10	6
39	TXA396K050P1G	G	10	6

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