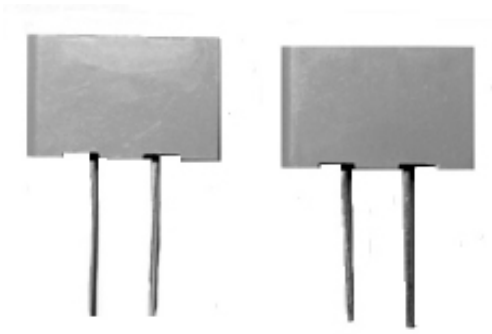
Molded, Radial Lead, Solid Tantalum Capacitors



The Type TIM radial molded solid tantalum capacitor is great for saving board space with its higher profile and smaller board space requirement. It is ideal for high density packaging coupled with low DCL and low ESR performance needed in compact power supply designs. The radius on the vertical side allows for polarization during automatic or hand insertion. The Type TIM is available in bulk or on radial tape and reel.

Highlights

- Precision Molded
- Low DCL
- Low ESR
- Radius on vertical edge for polarity identification
- Excellent temperature stability
- Standoffs for easier flux removal
- Resistant to shock and vibraton

Specifications

Capacitance Range: 0.10 µF to 220 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 25 ºC limit
+125 ºC - 12.5 x 25 ºC limit

Capacitance Change Maximum:
–10% @ –55 ºC
+10% @ +85 ºC
+15% @ +125 ºC

Maximum Power Dissipation:
W & X .090 Watts
Y .100 Watts
Z .125 Watts

Reel Packaging per EIA- RS-468:

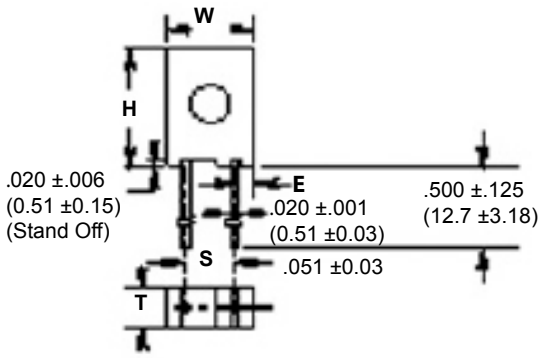
Case Code	Quantity
W	1,500 per 14" Reel
X	1,500 per 14" Reel
Y	1,500 per 14" Reel
Z	N/A

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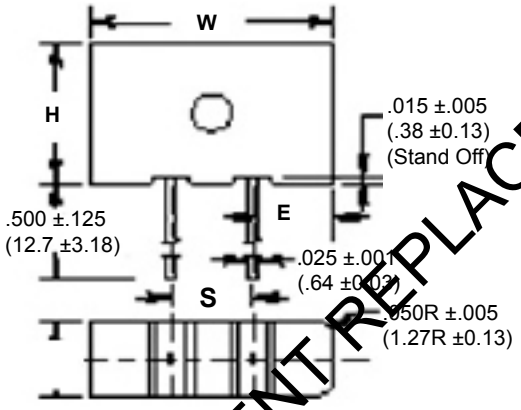
Type TIM Solid Tantalum Capacitors

Capacitor Outline Drawing

W Case



X, Y, Z Cases



Note:
On the "X" Case sizes, the standoff appears only between the two leads

Case Code	H Case Height	W Case Width	T Case Thickness	E Case to Wire	S Lead spacing
W	.345 ±.008 (8.76 ±.203)	.230 ±.005 (5.84 ±.127)	.105 ±.005 (2.67 ±.127)	.050 ±.010 (1.27 ±0.25)	.125 ±.005 (3.18 ±0.127)
X	.225 ±.015 (5.71 ±0.38	.285 ±.015 (7.24 ±.0.38)	.170 ±.015 (4.32 ±.0.38)	.042 ±.010 (1.07 ±.0.25)	.200 ±.005 (5.08 ±.0.127)
Y	.325 ±.015 (8.26 ±0.38)	.325 ±.015 (8.26 ±0.38)	.170 ±.015 (4.32 ±.0.38)	.062 ±.010 (1.57 ±.0.25)	.200 ±.005 (5.08 ±.0.127)
Z	.375 ±.015 (9.53 ±0.38)	.600 ±.015 (15.24 ±.0.38)	.195 ±.015 (4.95 ±.0.38)	.200 ±.010 (5.08 ±.0.25)	.200 ±.005 (5.08 ±.0.127)

Dimensions in inches

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Part Numbering System

TIM	150	K	010	P	0	Z
Type	Capacitance	Tolerance	Voltage	Polar	Molded Case	Case Code
TIM	**104** = 0.10 µF	**K** = ±10%	**006** = 6 Vdc	**P =** Polar	**0**	**W**
	105 = 1.0 µF	**M** = ±20%	**010** = 10 Vdc			**X**
	225 = 2.2 µF		**015** = 15 dc			**Y**
	186 = 18.6 µF		**020** = 20 Vdc			**Z**
	157 = 150 µF		**025** = 25 Vdc			
			035 = 35 Vdc			
			050 = 50 Vdc			

Ratings

Cap (µF)	Catalog Part Number	Case Code	Max DCL @ +25 ºC (µA)	Max DF @ +25 ºC 120 Hz (%)	Max Ripple 25 ºC @ 120 Hz (mA rms)	Max Ripple 25 ºC @ 1 kHz (mA rms)
			6 WVdc @ 85 ºC 4 WVdc @ 125 ºC			
22	TIM226*006P0X	X	1	6	35	290
56	TIM566*006P0Y	Y	5	6	89	570
68	TIM686*006P0Y	Y	5	6	100	630
220	TIM227*006P0Z	Z	10	6	350	1000
			10 WVdc @ 85 ºC 7 WVdc @ 125 ºC			
6.8	TIM685*010P0X	X	1	6	18	150
10	TIM106*010P0W	W	1	6	26	220
10	TIM106*010P0X	X	1	6	26	220
15	TIM156*010P0W	W	1	6	39	270
15	TIM156*010P0X	X	1	6	39	270
22	TIM226*010P0Y	Y	2	6	58	360
33	TIM336*010P0Y	Y	2	6	87	440
39	TIM396*010P0Y	Y	5	6	100	480
47	TIM476*010P0Y	Y	5	6	120	590
56	TIM566*010P0Y	Y	5	6	140	650
150	TIM157*010P0Z	Z	15	6	390	920
			15 WVdc @ 85 ºC 10 WVdc @ 125 ºC			
5.6	TIM565*015P0X	X	1	6	22	180
6.8	TIM685*015P0X	X	1	6	27	180
8.2	TIM825*015P0X	X	1	6	32	200
10	TIM106*015P0Y	Y	1	6	35	270
15	TIM156*015P0Y	Y	2	6	59	290
22	TIM226*015P0Y	Y	5	6	87	360
27	TIM276*015P0Y	Y	5	6	100	390
33	TIM336*015P0Y	Y	5	6	130	440
			20 WVdc @ 85 ºC 13 WVdc @ 125 ºC			
5.6	TIM565*020P0W	W	1	6	29	180
6.8	TIM685*020P0W	W	1	6	36	200
			25 WVdc @ 85 ºC 17 WVdc @ 125 ºC			
3.3	TIM335*025P0W	W	1	4	21	150
3.3	TIM335*025P0X	X	1	6	21	150
4.7	TIM475*025P0X	X	1	6	31	180
6.8	TIM685*025P0Y	Y	1	6	45	200
10	TIM106*025P0X	X	1	6	4	190
10	TIM106*025P0Y	Y	1	6	66	240
12	TIM126*025P0Y	Y	1	6	79	260
15	TIM156*025P0Y	Y	2	6	99	290

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

Type TIM Solid Tantalum Capacitors

Cap (µF)	Catalog Part Number	Case Code	Max DCL @ +25 ºC (µA)	Max DF @ +25 ºC 120 Hz (%)	Max Ripple 25 ºC @ 120 Hz (mA rms)	Max Ripple 25 ºC @ 1 kHz (mA rms)
35 WVdc @ 85 ºC 23 WVdc @ 125 ºC						
0.10	TIM104*035P0X	X	1	6	1	8
0.22	TIM224*035P0X	X	1	6	2	17
0.47	TIM474*035P0X	X	1	6	4.3	36
1.00	TIM105*035P0X	X	1	6	9.3	77
2.20	TIM225*035P0W	W	1	4	20	120
2.20	TIM225*035P0X	X	1	6	20	120
2.70	TIM275*035P0W	W	1	4	25	140
3.30	TIM335*035P0X	X	1	6	30	150
3.90	TIM395*035P0Y	Y	1	6	35	180
4.70	TIM475*035P0X	X	1	6	32	155
4.70	TIM475*035P0Y	Y	1	6	43	200
6.80	TIM685*035P0Y	Y	2	6	63	210
8.20	TIM825*035P0Y	Y	5	6	76	220
10.00	TIM106*035P0Y	Y	5	6	93	240
22.00	TIM226*035P0Z	Z	10	6	200	400
27.00	TIM276*035P0Z	Z	10	6	250	450
33.00	TIM336*035P0Z	Z	10	6	300	490
50 WVdc @ 85 ºC 33 WVdc @ 125 ºC						
0.10	TIM104*050P0X	X	1	6	1.3	11
0.22	TIM224*050P0X	X	1	6	2.9	24
0.33	TIM334*050P0X	X	1	6	4.4	36
1.0	TIM105*050P0W	W	1	4	13	86
1.0	TIM105*050P0X	X	1	6	13	87
1.5	TIM155*050P0W	W	1	4	19	100
1.5	TIM155*050P0X	X	1	6	19	100
2.2	TIM225*050P0X	X	1	6	29	120
4.7	TIM475*050P0Y	Y	5	6	62	200
5.6	TIM565*050P0Y	Y	5	6	74	220
6.8	TIM685*050P0Z	Z	5	6	90	220
10.0	TIM106*050P0Z	Z	5	6	130	270
15.0	TIM156*050P0Z	Z	10	6	190	330

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