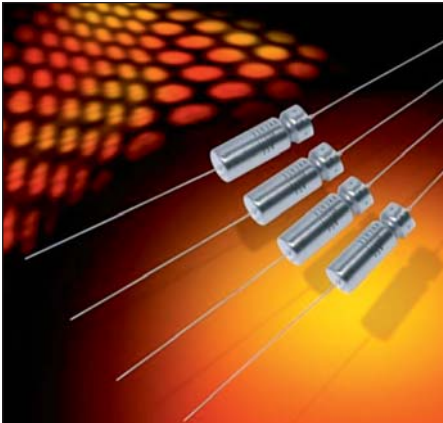


TWC-Y High Temperature Series



COTS-Plus 200°C Wet Tantalum



The TWC-Y high temperature series represents a COTS-Plus version of conventional wet electrolytic tantalum capacitors that are designed for use at 200°C. The majority of components listed are now capable of 500 hours of operation at extreme temperature with the applicable derated voltage.

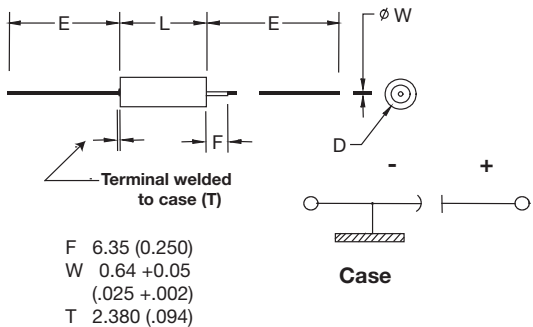
This design includes a welded tantalum can and header assembly that provides a hermetic seal to withstand harsh environments.

This is a new product line so please contact the factory for availability and additional details.

CASE DIMENSIONS: millimeters (inches)

Standard Case Size	AVX Case Size	L +0.79 (0.031) -0.41 (0.016)	D Basic Case ±0.41 (0.016)	D Insulated Case Max	E ±6.35 (0.250)
T1	A	11.51 (0.453)	4.78 (0.188)	5.56 (0.219)	38.10 (1.500)
T2	B	16.28 (0.641)	7.14 (0.281)	7.92 (0.312)	57.15 (2.250)
T3	D	19.46 (0.766)	9.52 (0.375)	10.31 (0.406)	57.15 (2.250)
T4	E	26.97 (1.062)	9.52 (0.375)	10.31 (0.406)	57.15 (2.250)

OUTLINE DIMENSIONS



HOW TO ORDER

AVX PART NUMBER:

TWC	B	476	*	050	□	C	Y	Z	00	00
Type	Case Size	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Capacitance Tolerance M = ±20% K = ±10%	Voltage Code	Insulation Sleeve C = Without Sleeve S = With Sleeve	ESR C = Standard ESR	Qualification Y = High Temp.	Reliability Z = Non-ER	Termination Finish 00 = Sn/Pb 60/40	Custom Test Options 00 = Standard

Not RoHS Compliant

TECHNICAL SPECIFICATIONS

Technical Data: Unless otherwise specified, all technical data relate to an ambient temperature of +25°C

Capacitance Tolerance: ±10%; ±20%

Rated Voltage (V_R)	≤ 85°C	6	8	10	15	25	30	50	60	75	100	125
Category Voltage (V_C)	125°C	4	5	7	10	15	20	30	40	50	65	85
High Temp, Voltage (V_T)	200°C	3.6	4.8	6	9	12	18	30	36	45	60	75
Surge Voltage (V_S)	≤ 85°C	6.9	9.2	11.5	17.3	28.8	34.5	57.5	69	86.3	115	144

Temperature Range: -55°C to +200°C



TWC-Y High Temperature Series



COTS-Plus 200°C Wet Tantalum

STANDARD RATINGS & PART NUMBER REFERENCE

AVX Part Number	Cap (µF) +25°C at 120Hz	DC Rated Voltage (V) at +85°C	DC Leakage (µA)		ESR Max (Ohms) at 120Hz	Maximum Capacitance Change (%)			Case Size	
			+25°C	+85°C & +125°C		-55°C	+85°C	+125°C	Standard	AVX
6 VDC at 85°C 4 VDC at 125°C 3.6 VDC at 200°C										
+TWCB147*006□CYZ0000	140	6	1	3	1.99	-40	14	16	T2	B
TWCD337*006□CYZ0000	330	6	2	7.9	1.45	-44	14	16	T3	D
TWCD567*006□CYZ0000	560	6	2	13	1.3	-64	17.5	20	T3	D
8 VDC at 85°C 5 VDC at 125°C 4.8 VDC at 200°C										
+TWCB127*008□CYZ0000	120	8	1	2	2.21	-44	17.5	20	T2	B
TWCD297*008□CYZ0000	290	8	2	6	1.56	-64	17.5	20	T3	D
TWCD437*008□CYZ0000	430	8	2	14	1.42	-64	17.5	20	T3	D
10 VDC at 85°C 7 VDC at 125°C 6 VDC at 200°C										
+TWCB107*010□CYZ0000	100	10	1	4	1.99	-36	14	16	T2	B
TWCD257*010□CYZ0000	250	10	2	10	1.59	-40	14	16	T3	D
TWCD397*010□CYZ0000	390	10	2	16	1.5	-64	17.5	20	T3	D
15 VDC at 85°C 10 VDC at 125°C 9 VDC at 200°C										
+TWCB706*015□CYZ0000	70	15	1	4	2.46	-28	14	16	T2	B
+TWCD177*015□CYZ0000	170	15	2	10	1.95	-32	14	16	T3	D
TWCD277*015□CYZ0000	270	15	2	16	1.57	-56	17.5	20	T3	D
25 VDC at 85°C 15 VDC at 125°C 15 VDC at 200°C										
TWCA686*025□CYZ0000	68	25	2	9	4.29	-50	12	15	T1	A
+TWCB107*025□CYZ0000	100	25	1	10	1.99	-28	13	15	T2	B
TWCD127*025□CYZ0000	120	25	2	6	2.32	-32	13	15	T2	B
+TWCD187*025□CYZ0000	180	25	2	18	1.92	-48	13	15	T3	D
TWCB277*025□CYZ0000	270	25	3	16	2.70	-62	13	16	T3	D
30 VDC at 85°C 20 VDC at 125°C 18 VDC at 200°C										
TWCA566*030□CYZ0000	56	30	2	9	5.21	-48	12	15	T1	A
+TWCB686*030□CYZ0000	68	30	1	8	2.54	-24	13	15	T2	B
TWCD107*030□CYZ0000	100	30	2	12	2.26	-28	10.5	12	T3	D
TWCD157*030□CYZ0000	150	30	2	18	2.03	-48	13	15	T3	D
TWCB227*030□CYZ0000	220	30	3	16	2.53	-60	13	16	T2	B
TWCE307*030□CYZ0000	300	30	8	32	1.37	-60	25	25	T4	E
50 VDC at 85°C 30 VDC at 125°C 30 VDC at 200°C										
TWCA336*050□CYZ0000	33	50	2	9	4.95	-39	10	12	T1	A
+TWCB476*050□CYZ0000	47	50	1	9	3.11	-28	13	15	T2	B
TWCD606*050□CYZ0000	60	50	2	12	2.65	-16	10.5	12	T3	D
TWCD826*050□CYZ0000	82	50	2	16	2.43	-32	13	15	T3	D
TWCB127*050□CYZ0000	120	50	4	24	2.49	-42	12	15	T2	B
TWCE167*050□CYZ0000	160	50	8	32	1.41	-50	25	25	T4	E
60V VDC at 85°C 40 VDC at 125°C 36 VDC at 200°C										
TWCA276*060□CYZ0000	27	60	3	12	5.01	-34	10	12	T1	A
TWCD506*060□CYZ0000	50	60	2	12	2.65	-16	10.5	12	T3	D
TWCD686*060□CYZ0000	68	60	2	16	2.54	-32	10.5	12	T3	D
TWCB107*060□CYZ0000	100	60	4	20	2.52	-36	12	15	T2	B
TWCE147*060□CYZ0000	140	60	8	32	1.52	-40	20	20	T4	E
75V VDC at 85°C 50 VDC at 125°C 45 VDC at 200°C										
TWCA226*075□CYZ0000	22	75	3	12	5.13	-29	10	12	T1	A
TWCD566*075□CYZ0000	56	75	2	17	2.61	-28	10.5	15	T3	D
TWCB826*075□CYZ0000	82	75	4	24	2.46	-30	12	15	T2	B
TWCE117*075□CYZ0000	110	75	9	36	1.45	-35	20	20	T4	E
100 VDC at 85°C 65 VDC at 125°C 60 VDC at 200°C										
+TWCB226*100□CYZ0000	22	100	1	9	4.52	-16	8	8	T2	B
TWCE127*100□CYZ0000	120	100	12	48	2.76	-35	15	17	T4	E
125 VDC at 85°C 85 VDC at 125°C 75 VDC at 200°C										
+TWCB276*125□CYZ0000	27	125	5	24	3.54	-18	12	15	T2	B
TWCE826*125□CYZ0000	82	125	12	48	2.82	-30	15	17	T4	E

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.

Note: AVX reserves the right to supply higher voltage rating in the same case size to the same reliability standards.

+Ratings currently qualified to 300 hours of operation at 200C with 60% rated voltage.

200°C LIFE TEST:

These components are capable of 500 hours of operation at 200°C with the applicable 60% derated voltage, with the exception of those ratings indicated in the table as having only 300 hour qualifications. These ratings will be extended to 500 hour capability after completion of further testing. Following the life test components which are stabilized at 25°C ± 5°C shall exhibit:

Leakage less than 200% the original requirement or ± 10uA (whichever is greater)

ESR not greater than 200% the original requirement

Capacitance increase less than 10% or decrease less than 20% the initial measurement

