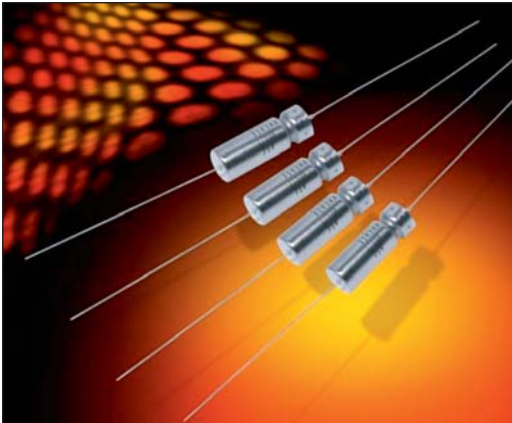


TWC-Y High Temperature Series



COTS-Plus 200°C Wet Tantalum

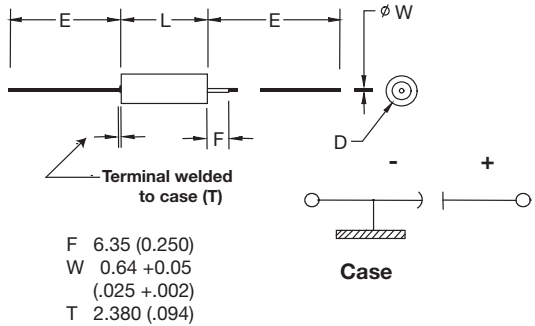


The TWC-Y high temperature series represents a COTS-Plus version of conventional wet electrolytic tantalum capacitors that are designed for use at 200°C. Components are capable of 300 hours of operation at extreme temperature with the applicable derated voltage.

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.

OUTLINE DIMENSIONS



CASE DIMENSIONS: millimeters (inches)

DSCC 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)

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

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

STANDARD RATINGS & PART NUMBER REFERENCE

AVX Part Number	Cap (µF) +25°C at 120Hz	DC Rated Voltage (V) at +85°C	DC Leakage (µA)		DF (Max)	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	21	1.99	-40	14	16	T2	B
8 VDC at 85°C 5 VDC at 125°C 4.8 VDC at 200°C											
TWCB127*008□CYZ0000	120	8	1	2	20	2.21	-44	17.5	20	T2	B
10 VDC at 85°C 7 VDC at 125°C 6 VDC at 200°C											
TWCB107*010hCYZ0000	100	10	1	4	15	1.99	-36	14	16	T2	B
15 VDC at 85°C 10 VDC at 125°C 9 VDC at 200°C											
TWCB706*015hCYZ0000	70	15	1	4	13	2.46	-28	14	16	T2	B
TWCD177*015hCYZ0000	170	15	2	10	25	1.95	-32	14	16	T3	D
25 VDC at 85°C 15 VDC at 125°C 15 VDC at 200°C											
*TWCA686*025hCYZ0000	68	25	2	9	22	4.29	-40	12	15	T1	A
TWCB107*025hCYZ0000	100	25	1	10	15	1.99	-28	13	15	T2	B
TWCD187*025hCYZ0000	180	25	2	18	26	1.92	-48	13	15	T3	D
30 VDC at 85°C 20 VDC at 125°C 18 VDC at 200°C											
*TWCA566*030hCYZ0000	56	30	2	9	22	5.21	-38	12	15	T1	A
TWCB686*030hCYZ0000	68	30	1	8	13	2.54	-24	13	15	T2	B
50 VDC at 85°C 30 VDC at 125°C 30 VDC at 200°C											
*TWCA336*050hCYZ0000	33	50	2	9	12.3	4.95	-29	10	12	T1	A
TWCB476*050hCYZ0000	47	50	1	9	11	3.11	-28	13	15	T2	B
75V VDC at 85°C 50 VDC at 125°C 45 VDC at 200°C											
*TWCA226*075hCYZ0000	22	75	3	12	8.5	5.13	-19	10	12	T1	A
100 VDC at 85°C 65 VDC at 125°C 60 VDC at 200°C											
TWCB226*100hCYZ0000	22	100	1	9	7.5	4.52	-16	8	8	T2	B
TWCE127*100hCYZ0000	120	100	12	48	25	2.76	-35	15	17	T4	E
125 VDC at 85°C 85 VDC at 125°C 75 VDC at 200°C											
TWCB276*125hCYZ0000	27	125	5	24	7.2	3.54	-18	12	15	T2	B
TWCE826*125hCYZ0000	82	125	12	48	17.4	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.

*The T1 A case components will be available shortly after the initial product release.

200°C LIFE TEST: Components are capable of 300 hours of operation at 200°C with the applicable 60% derated voltage. 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