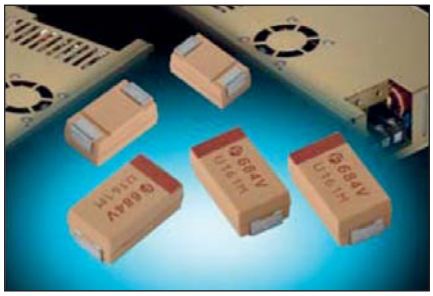
TAW Series

Tantalum Solid Electrolytic Fused Capacitors

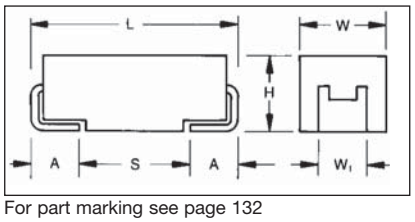


- Thin film fuse connected in series with capacitor
- Protection from possible damaging from high DC leakage current (short circuit failure)
- CV range: 6.8-100µF / 10-50V
- Application: servers

LEAD-FREE

LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT



For part marking see page 132

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L±0.20 (0.008)	W+0.20 (0.008) -0.10 (0.004)	H±0.20 (0.008) -0.10 (0.004)	W_1 ±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)	S Min.
D	2917	7343-31	7.30 (0.287)	4.30 (0.169)	2.90 (0.114)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
W_1 dimension applies to the termination width for A dimensional area only.								

HOW TO ORDER

TAW	D	476	*	010	R	0500
Type	**Case Size** See table above	**Capacitance Code** pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	**Tolerance** K=±10% M=±20%	**Rated DC Voltage** 010=10Vdc 016=16Vdc 020=20Vdc 025=25Vdc 050=50Vdc	**Packaging** R = 7" T/R S = 13" T/R	**ESR in mΩ**

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C						
Capacitance Range:	6.8 µF to 100 µF						
Capacitance Tolerance:	±10%; ±20%						
Rated Voltage (V_R)	≤ +85°C:	10	16	20	25	50	
Category Voltage (V_C)	≤ +125°C:	7	10	13	17	33	
Surge Voltage (V_S)	≤ +85°C:	13	20	26	32	65	
Surge Voltage (V_S)	≤ +125°C:	8	13	16	20	40	
Fuse Off	I > 4A in 1s, insulating resistance > 10MΩ						
Fuse Continuous Current Capability	0.75A						
Temperature Range:	-55°C to +125°C						
Reliability:	1% per 1000 hours at 85°C, Vr with 0.1Ω/V series impedance, 60% confidence level						
	Meets requirements of AEC-Q200						

TAW Series

Tantalum Solid Electrolytic Fused Capacitors

CAPACITANCE AND VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V_R) to 85°C					
µF	Code	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	50V (T)
1.0	105						
2.2	225						
4.7	475						
6.8	685						D(700)
10	106					D(600)	D(700)
22	226					D(600)	
33	336			D(600)	D(500)		
47	476		D(500)	D(800)			
100	107		D(500)				

Available Ratings (ESR ratings in mOhms in brackets)

Engineering samples - please contact manufacturer

*Codes under development – subject to change

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards.

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz RMS Current (mA)			100kHz RMS Voltage (mV)		
							25°C	85°C	125°C	25°C	85°C	125°C
10 Volt @ 85°C (7 Volt @ 125°C)												
TAWD476*010#0500	D	47	10	4.7	6	500	548	493	219	274	246	110
TAWD107*010#0500	D	100	10	10	8	500	548	493	219	274	246	110
16 Volt @ 85°C (10 Volt @ 125°C)												
TAWD336*016#0600	D	33	16	5.3	6	600	500	450	200	300	270	120
TAWD476*016#0800	D	47	16	7.5	7	800	433	390	173	346	312	139
20 Volt @ 85°C (13 Volt @ 125°C)												
TAWD336*020#0500	D	33	20	6.6	6	500	548	493	219	274	246	110
25 Volt @ 85°C (17 Volt @ 125°C)												
TAWD106*025#0600	D	10	25	2.5	6	600	500	450	200	300	270	120
TAWD226*025#0600	D	22	25	5.5	6	600	500	450	200	300	270	120
50 Volt @ 85°C (33 Volt @ 125°C)												
TAWD685*050#0700	D	6.8	50	3.4	6	700	463	417	185	324	292	130
TAWD106*050#0700	D	10	50	5	6	700	463	417	185	324	292	130

- Insert R for 7" reel or S for 13" reel

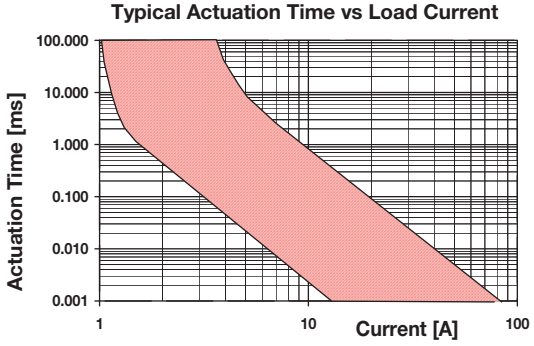
All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5 RMS with DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalogue limit post mounting.

TAW series is MSL level 1 according to J-STD-020C.

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

TYPICAL FUSE ACTUATION



Note: for a different fuse characteristic requirements please contact manufacturer