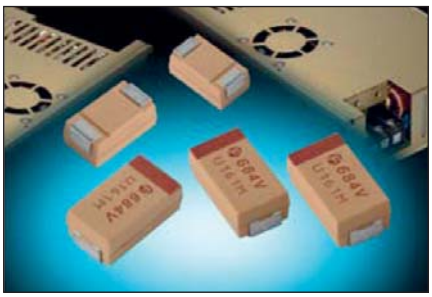
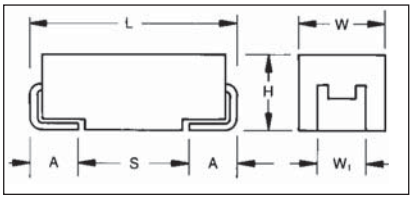
TAW Series

Tantalum Solid Electrolytic Fused Capacitors



TAW Fused Tantalum Capacitors offer protection from possible damaging short circuit failure modes. This is accomplished with an internal fuse using thin film technology that is in series with the capacitor. The AVX fused tantalum offers lower ESR limits than competitive fused tantalum capacitors.

RoHS COMPLIANT



For part marking see page 175

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	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.
B	3528-21	3.50 (0.138)	2.80 (0.110)	1.90 (0.075)	2.20 (0.087)	0.80 (0.031)	1.40 (0.055)
C	6032-28	6.00 (0.236)	3.20 (0.126)	2.60 (0.102)	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
D	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. Under development

HOW TO ORDER

TAW	D	476	*	010	R	0500
Type	**Case Code** See table above	**Capacitance** 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 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:		10 µF to 100 µF						
Capacitance Tolerance:		±10%; ±20%						
Rated Voltage (V_R)	⩽ +85°C:	6.3	10	16	20	25	35	50
Category Voltage (V_C)	⩽ +125°C	4	7	10	13	17	23	33
Surge Voltage (V_S)	⩽ +85°C	8	13	20	26	32	46	65
	⩽ +125°C	5	8	13	16	20	28	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						

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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)	35V (V)	50V (T)
1.0	105					B	B	C
2.2	225			B	B			
4.7	475			B			D	
6.8	685		B		C			D(700)
10	106	B		C	C	D(600)		
22	226	B	C	D	D	D		
33	336		C	D(600)	D			
47	476	C	D(500)	D				
100	107		D(500)					

Available Ratings, (ESR ratings in mOhms in brackets)

Developmental Ratings - subject to change.

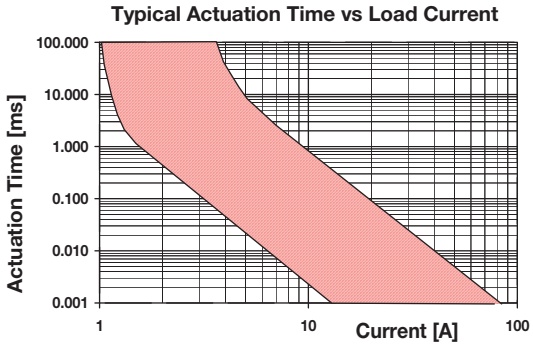
RATINGS & PART NUMBER REFERENCE

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 (6.6 Volt @ 125°C)												
TAWD476*010R0500	D	47	10	4.7	6	500	548	493	219	274	246	110
TAWD107*010R0500	D	100	10	10	8	500	548	493	219	274	246	110
16 Volt @ 85°C (10 Volt @ 125°C)												
TAWD336*016R0600	D	33	16	5.3	6	600	500	450	200	300	270	120
25 Volt @ 85°C (17 Volt @ 125°C)												
TAWD106*025R0600	D	10	25	2.5	6	600	500	450	200	300	270	120
50 Volt @ 85°C (33 Volt @ 125°C)												
TAWD685*050R0700	D	6.8	50	3.4	6	700	463	417	185	324	292	130

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.

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