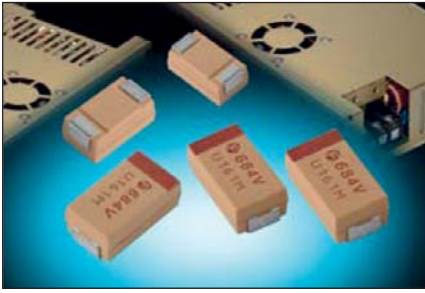


# TAW Series

## 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.

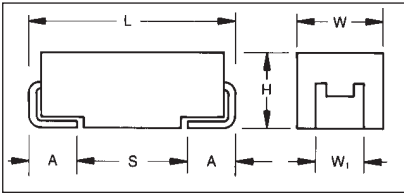


LEAD-FREE

LEAD-FREE COMPATIBLE COMPONENT



RoHS COMPLIANT



For part marking see page 122

### 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 <sub>1</sub> ±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<sub>1</sub> dimension applies to the termination width for A dimensional area only. **Under development**

### HOW TO ORDER

**TAW**

Type

**D**

Case Code  
See table above

**476**

Capacitance  
pF code: 1st two digits represent significant figures  
3rd digit represents multiplier (number of zeros to follow)

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Tolerance  
K=±10%  
M=±20%

**010**

Rated DC Voltage  
010=10Vdc  
016=16Vdc  
020=20Vdc  
050=50Vdc

**R**

Packaging  
R = 7" T/R  
S = 13" T/R

**0500**

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 <sub>R</sub> )	≤ +85°C:	6.3	10	16	20	25	35	50
Category Voltage (V <sub>C</sub> )	≤ +125°C	4	7	10	13	17	23	33
Surge Voltage (V <sub>S</sub> )	≤ +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, V <sub>r</sub> with 0.1Ω/V series impedance, 60% confidence level							
	Meets requirements of AEC-Q200							



## Tantalum Solid Electrolytic Fused Capacitors

### CAPACITANCE AND VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V <sub>R</sub> ) 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(600)		
33	336		C*	D(600)	D*			
47	476	C*	D(500)	D*				
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
<b>10 Volt @ 85°C (6.6 Volt @ 125°C)</b>												
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
<b>16 Volt @ 85°C (10 Volt @ 125°C)</b>												
TAWD336*016#0600	D	33	16	5.3	6	600	500	450	200	300	270	120
<b>25 Volt @ 85°C (17 Volt @ 125°C)</b>												
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
<b>50 Volt @ 85°C (33 Volt @ 125°C)</b>												
TAWD685*050#0700	D	6.8	50	3.4	6	700	463	417	185	324	292	130

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

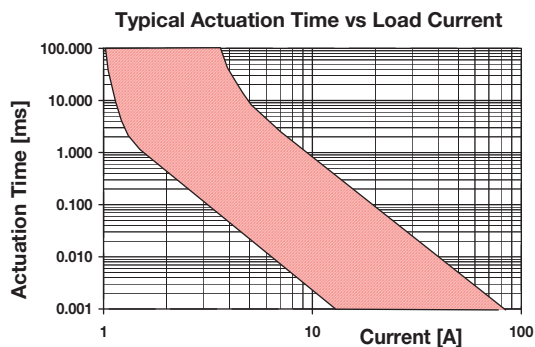
All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5 RMS with DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

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