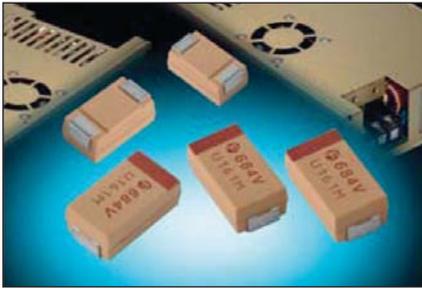


# TAW Series



## 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: 6.8-100 $\mu$ F / 10-50V
- Application: servers

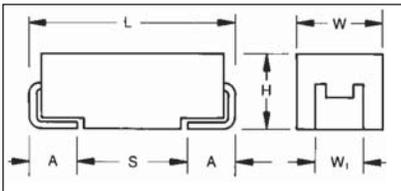


LEAD-FREE

LEAD-FREE COMPATIBLE COMPONENT



RoHS COMPLIANT



For part marking see page 130

### CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L $\pm$ 0.20 (0.008)	W $\pm$ 0.20 (0.008) -0.10 (0.004)	H $\pm$ 0.20 (0.008) -0.10 (0.004)	W <sub>1</sub> $\pm$ 0.20 (0.008)	A $\pm$ 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<sub>1</sub> dimension applies to the termination width for A dimensional area only.

### HOW TO ORDER

<b>TAW</b>	<b>D</b>	<b>476</b>	<b>*</b>	<b>010</b>	<b>R</b>	<b>0500</b>
<b>Type</b>	<b>Case Size</b> See table above	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Tolerance</b> K= $\pm$ 10% M= $\pm$ 20%	<b>Rated DC Voltage</b> 010=10Vdc 016=16Vdc 020=20Vdc 025=25Vdc 035=35Vdc 050=50Vdc	<b>Packaging</b> R = Pure Tin 7" Reel S = Pure Tin 13" Reel	<b>ESR in m<math>\Omega</math></b>

### TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C							
Capacitance Range:	6.8 $\mu$ F to 100 $\mu$ F							
Capacitance Tolerance:	$\pm$ 10%; $\pm$ 20%							
Rated Voltage (V <sub>R</sub> )	$\leq$ +85°C:	10	16	20	25	35	50	
Category Voltage (V <sub>C</sub> )	$\leq$ +125°C:	7	10	13	17	23	33	
Surge Voltage (V <sub>S</sub> )	$\leq$ +85°C:	13	20	26	32	46	65	
Surge Voltage (V <sub>S</sub> )	$\leq$ +125°C:	8	13	16	20	28	40	
Fuse Off	I > 4A in 1s, insulating resistance > 10M $\Omega$							
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 0.1 $\Omega$ /V series impedance, 60% confidence level							

## Tantalum Solid Electrolytic Fused Capacitors

### CAPACITANCE AND RATED VOLTAGE, VR (VOLTAGE CODE) 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							
2.2	225							
4.7	475							
6.8	685						D(600)	D(700)
10	106					D(600)	D(600)	D(700)
22	226				D(500)	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	MSL	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 (7 Volt @ 125°C)</b>													
TAWD476*010#0500	D	47	10	4.7	6	500	1	548	493	219	274	246	110
TAWD107*010#0500	D	100	10	10	8	500	1	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	1	500	450	200	300	270	120
TAWD476*016#0800	D	47	16	7.5	7	800	1	433	390	173	346	312	139
<b>20 Volt @ 85°C (13 Volt @ 125°C)</b>													
TAWD226*020#0500	D	22	20	4.4	6	500	1	548	493	219	274	246	110
TAWD336*020#0500	D	33	20	6.6	6	500	1	548	493	219	274	246	110
<b>25 Volt @ 85°C (17 Volt @ 125°C)</b>													
TAWD106*025#0600	D	10	25	2.5	6	600	1	500	450	200	300	270	120
TAWD226*025#0600	D	22	25	5.5	6	600	1	500	450	200	300	270	120
<b>35 Volt @ 85°C (23 Volt @ 125°C)</b>													
TAWD685*035#0600	D	6.8	35	2.4	6	600	1	500	450	200	300	270	120
TAWD106*035#0600	D	10	35	3.5	6	600	1	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	1	463	417	185	324	292	130
TAWD106*050#0700	D	10	50	5	6	700	1	463	417	185	324	292	130

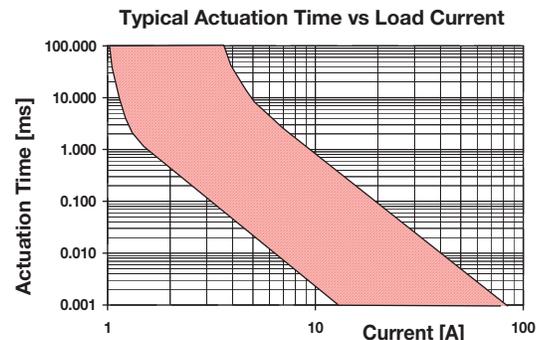
Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

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

For typical weight and composition see page 123.

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

### TYPICAL FUSE ACTUATION



Note: for a different fuse characteristic requirements please contact manufacturer

# Mouser Electronics

Authorized Distributor

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## AVX:

[TAWD106M050R0700](#) [TAWD336M020R0500](#) [TAWD476M016R0800](#) [TAWD106K025R0600](#) [TAWD106M025R0600](#)  
[TAWD107K010R0500](#) [TAWD107M010R0500](#) [TAWD336K016R0600](#) [TAWD336M016R0600](#) [TAWD476K010R0500](#)  
[TAWD476M010R0500](#) [TAWD685K050R0700](#) [TAWD685M050R0700](#) [TAWD226K025R0600](#) [TAWD106K050R0700](#)  
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