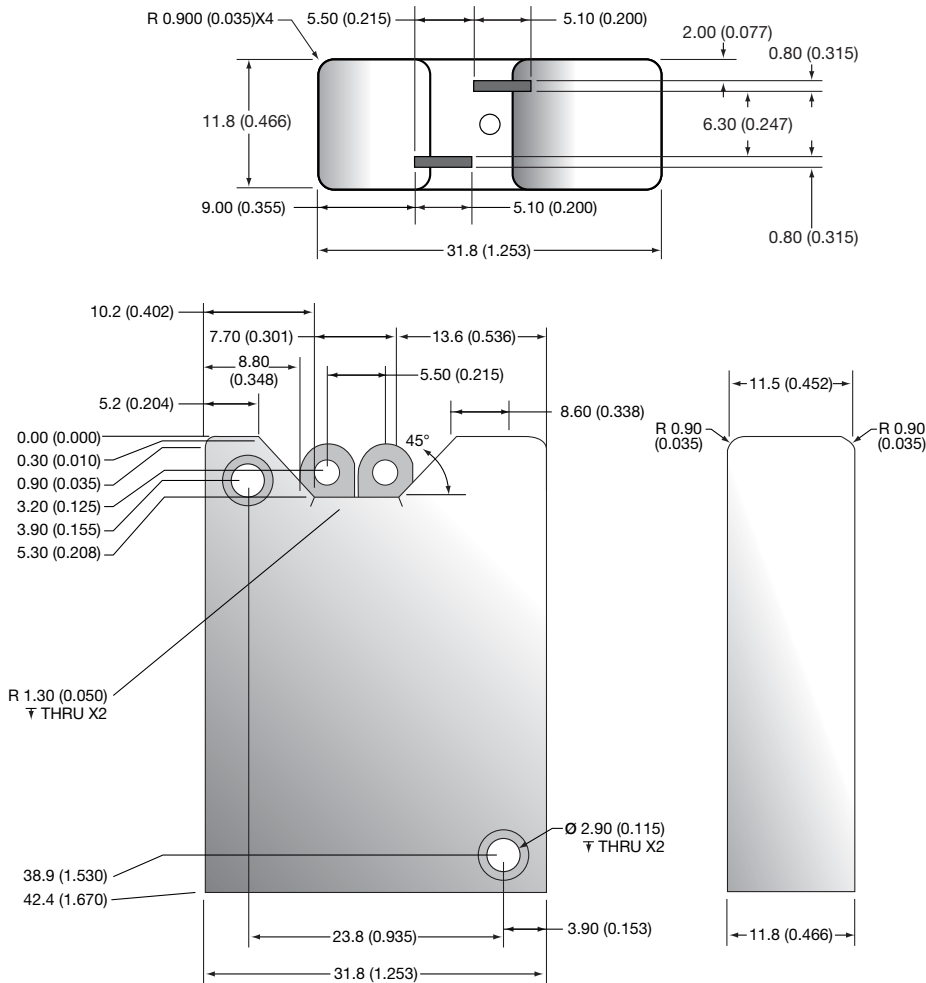


AVX modular packaged  
93026 style capacitors.

**Capacitance Range:** 200 $\mu$ F to 9000 $\mu$ F  
**Voltage Range:** 25 to 125V  
**Temperature Range:** -55°C to 125°C  
**Tolerance Range:** 10%, 20%

## DIMENSIONS: millimeters (inches)



## VOLTAGE RATINGS (Operating Temperature -55°C to 125°C)

Voltage (DC)								
Rated Voltage: (Ur)	85°C	25	30	50	60	75	100	125
Derated Voltage: (Uc)	125°C	15	20	30	40	50	65	85
Surge Voltage: (Us)	85°C	28.8	34.5	57.5	69	86.3	115	144

## HOW TO ORDER

### AVX PART NUMBER:

<b>TW</b>	<b>2E</b>	<b>227</b>	<b>*</b>	<b>050</b>	<b>C</b>	<b>B</b>	<b>@</b>	<b>Z</b>	<b>0</b>	<b>S</b>	<b>++</b>
Type	Style	Capacitance Code	Capacitance Tolerance	Voltage	C = N/A	Packaging	Qualification	Established Reliability	Reliability Grade	Termination Finish	Special Code
		pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	K = ±10% M = ±20%			B = Bulk	S = COTS-PLUS	Z = Non-ER	0 = Standard	S = Silver Plating	00 = Standard

Not RoHS Compliant

SnPb termination option is not RoHS compliant.

## RIPPLE CURRENT MULTIPLIERS vs. Frequency, temperature and applied voltage<sup>1/2/</sup>

Frequency of Applied Ripple Current	120Hz				800Hz				1kHz				
	≤55	85	105	125	≤55	85	105	125	≤55	85	105	125	
% of 85°C Rated Peak Voltage	100%	0.60	0.39	–	–	0.71	0.43	–	–	0.72	0.45	–	–
90%	0.60	0.46	–	–	0.71	0.55	–	–	0.72	0.55	–	–	
80%	0.60	0.52	0.35	–	0.71	0.62	0.42	–	0.72	0.62	0.42	–	
70%	0.60	0.58	0.44	–	0.71	0.69	0.52	–	0.72	0.70	0.52	–	
66-2/3%	0.60	0.60	0.46	0.27	0.71	0.71	0.55	0.32	0.72	0.72	0.55	0.32	

Frequency of Applied Ripple Current	10kHz				40kHz				100kHz				
	≤55	85	105	125	≤55	85	105	125	≤55	85	105	125	
% of 85°C Rated Peak Voltage	100%	0.88	0.55	–	–	1.00	0.63	–	–	1.10	0.69	–	–
90%	0.88	0.67	–	–	1.00	0.77	–	–	1.10	0.85	–	–	
80%	0.88	0.76	0.52	–	1.00	0.87	0.59	–	1.10	0.96	0.65	–	
70%	0.88	0.85	0.64	–	1.00	0.97	0.73	–	1.10	1.07	0.80	–	
66-2/3%	0.88	0.88	0.68	0.40	1.00	1.00	0.77	0.45	1.10	1.10	0.85	0.50	

1/At 125°C the rated voltage of the capacitors decreases to 66 2/3 of the 85°C rated voltage.

2/The peak of the applied ac ripple voltage plus the applied dc voltage must not exceed the dc voltage rating of the capacitors.

## RATINGS & PART NUMBER REFERENCE

AVX Part Number	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) 85°C	ESR Max (ohms) 120Hz	DC Leakage Max (µA)1/		Max Impedance (Ohms) -55°C at 120 Hz	Maximum Capacitance Change (%)			AC Ripple* (mA rms) 85°C at 40kHz
				+25°C	+85 and +125°C		-55°C	+85°C	+125°C	
<b>25 VDC at 85°C 15 VDC at 125°C</b>										
TW2D248*025CB@Z0S++	2400	25	0.33	10	40	3.50	-70	12	18	5200
TW3D368*025CB@Z0S++	3600	25	0.22	15	60	2.33	-70	12	18	7800
TW2E368*025CB@Z0S++	3600	25	0.25	12	50	3.50	-75	12	20	6200
TW2E448*025CB@Z0S++	4400	25	0.25	20	160	5.00	-90	30	50	6400
TW3E548*025CB@Z0S++	5400	25	0.17	18	75	2.33	-75	12	20	9300
TW3E668*025CB@Z0S++	6600	25	0.17	30	240	3.33	-90	30	50	9600
<b>30 VDC at 85°C 20 VDC at 125°C</b>										
TW2D208*030CB@Z0S++	2000	30	0.35	14	50	3.50	-70	10	18	5000
TW3D308*030CB@Z0S++	3000	30	0.23	21	75	2.33	-70	10	18	7500
TW2E308*030CB@Z0S++	3000	30	0.30	24	70	3.00	-72	10	20	6000
TW3E458*030CB@Z0S++	4500	30	0.20	36	105	2.00	-72	10	20	9000
<b>50 VDC at 85°C 30 VDC at 125°C</b>										
TW2D947*050CB@Z0S++	940	50	0.38	6	50	5.00	-50	8	15	4200
TW2E148*050CB@Z0S++	1360	50	0.35	10	80	4.00	-58	10	20	5500
TW3D148*050CB@Z0S++	1410	50	0.25	9	75	3.33	-50	8	15	6300
TW3E208*050CB@Z0S++	2040	50	0.23	15	120	2.67	-58	10	20	8250
TW2E308*050CB@Z0S++	3000	50	0.50	38	200	7.50	-90	25	35	6000
TW3E458*050CB@Z0S++	4500	50	0.33	57	300	5.00	-90	25	35	9000
TW3E908*050CB@Z0S++	9000	50	0.33	150	450	1.20	-80	60	85	9300
<b>60 VDC at 85°C 40 VDC at 125°C</b>										
TW2D787*060CB@Z0S++	780	60	0.45	6	50	7.50	-60	8	15	4200
TW2E118*060CB@Z0S++	1120	60	0.40	10	80	5.00	-58	8	15	5500
TW3D128*060CB@Z0S++	1170	60	0.30	9	75	5.00	-60	8	15	6300
TW3E178*060CB@Z0S++	1680	60	0.27	15	120	3.33	-58	8	15	8250
TW2E208*060CB@Z0S++	2000	60	0.50	24	180	10.00	-90	30	50	6400
TW3E308*060CB@Z0S++	3000	60	0.33	36	270	6.67	-90	30	50	9600
<b>75 VDC at 85°C 50 VDC at 125°C</b>										
TW2D667*075CB@Z0S++	660	75	0.50	6	60	6.00	-45	6	10	4200
TW2E947*075CB@Z0S++	940	75	0.45	10	100	6.00	-55	6	10	5500
TW3D997*075CB@Z0S++	990	75	0.33	9	90	4.00	-45	6	10	6300
TW3E148*075CB@Z0S++	1410	75	0.30	15	150	4.00	-55	6	10	8250
<b>100 VDC at 85°C 65 VDC at 125°C</b>										
TW2D307*100CB@Z0S++	300	100	0.80	6	50	11.00	-35	6	12	4200
TW2E447*100CB@Z0S++	440	100	0.60	10	100	7.50	-40	6	12	5500
TW3D457*100CB@Z0S++	450	100	0.53	9	75	7.33	-35	6	12	6300
TW3E667*100CB@Z0S++	660	100	0.40	15	150	5.00	-40	6	12	8250
<b>125 VDC at 85°C 85 VDC at 125°C</b>										
TW2D207*125CB@Z0S++	200	125	0.90	6	50	17.50	-35	5	12	4200
TW3D307*125CB@Z0S++	300	125	0.60	9	75	11.67	-35	5	12	6300
TW2E307*125CB@Z0S++	300	125	0.80	10	100	10.00	-35	6	12	5500
TW3E457*125CB@Z0S++	450	125	0.53	15	150	6.67	-35	6	12	8250
TW3E997*125CB@Z0S++	990	125	0.33	45	450	6.66	-60	20	60	7500

\*For reference only, contact factory for more details