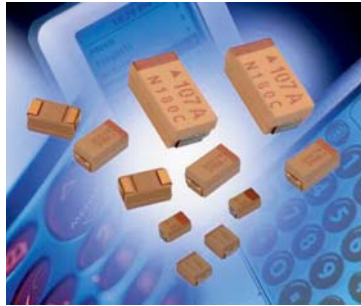


TLJ Series



Tantalum Solid Electrolytic Chip Capacitors High CV Consumer Series

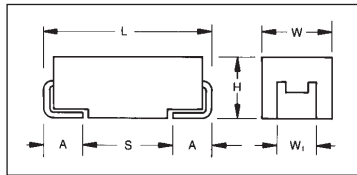


The consumer TLJ series of tantalum capacitors offers high capacitance vs. voltage ratio based on stable MnO₂ electrode capacitors. The TLJ series complies with RoHS requirements and it is an environmentally friendly component ready for lead-free assembly systems up to 3x reflow with 260°C peak temperature. The TLJ series is suitable for wide range of consumer electronic applications such as the latest portable handheld electronics, cellular phones, PDAs or other digital equipment and cameras.

- High Volumetric Efficiency
- Environmentally Friendly
- Small & Low Profile Cases
- 3x Reflow 260°C Compatible
- Consumer Applications



LEAD-FREE
LEAD-FREE COMPATIBLE
COMPONENT



For part marking see page 165

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.
A	3216-18	3.20 (0.126)	1.60 (0.063)	1.60 (0.063)	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
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)
G	3216-16	3.20 (0.126)	1.60 (0.063)	1.50 (0.059) max	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
H	3528-15	3.50 (0.138)	2.80 (0.110)	1.60 (0.063) max	2.20 (0.087)	0.80 (0.031)	1.40 (0.055)
J	1608-09	1.60 (0.063)	0.80 (0.032)	0.90 (0.035) max	0.60 (0.023)	0.30 (0.012)	0.55 (0.021)
K	3216-10	3.20 (0.126)	1.60 (0.063)	1.0 (0.039) max	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
N	2012-12	2.05 (0.081)	1.3 (0.051)	1.0 (0.039) max	1.0 (0.039)	0.5 (0.020)	0.85 (0.033)
P	2012-15	2.05 (0.081)	1.35 (0.053)	1.50 (0.059) max	1.0±0.1 (0.039±0.004)	0.50 (0.020)	0.85 (0.033)
R	2012-12	2.05 (0.081)	1.30 (0.051)	1.20 (0.047) max	1.0±0.1 (0.039±0.004)	0.50 (0.020)	0.85 (0.033)
S	3216-12	3.20 (0.126)	1.60 (0.063)	1.20 (0.047) max	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
T	3528-12	3.50 (0.138)	2.80 (0.110)	1.20 (0.047) max	2.20 (0.087)	0.80 (0.031)	1.40 (0.033)
W	6032-15	6.00 (0.236)	3.20 (0.126)	1.50 (0.059) max	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)

W₁ dimension applies to the termination width for A dimensional area only.

HOW TO ORDER

TLJ

Type

W

Case Size
See table above

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

M

Tolerance
M = ±20%

010

Rated DC Voltage
002 = 2.5Vdc
004 = 4Vdc
006 = 6.3Vdc
010 = 10Vdc
016 = 16Vdc
020 = 20Vdc
035 = 35Vdc

R

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

0200

ESR in mΩ

TECHNICAL SPECIFICATIONS

Technical Data:

All technical data relate to an ambient temperature of +25°C

Capacitance Range:

4.7 μF to 330 μF

Capacitance Tolerance:

±20%

Rated Voltage (V_R)

-55°C ≤ +40°C:

2.5	4	6.3	10	16	20	35
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Category Voltage (V_C)

at 85°C:

1.25	2	3.15	5	8	10	17.5
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Category Voltage (V_C)

at 125°C:

0.5	0.8	1.26	2	3.2	4	7
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Temperature Range:

-55°C to +125°C with category voltage

Reliability:

0.2% per 1000 hours at 85°C, 0.5xV_R with 0.1Ω/V series impedance with 60% confidence level

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.



Tantalum Solid Electrolytic Chip Capacitors High CV Consumer Series

CAPACITANCE AND RATED VOLTAGE, V_R (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC to 40°C / 0.5DC to 85°C / 0.2DC to 125°C						
μF	Code	2.5V (e)	4V (G)	6.3V (J)	10V (A)	16V (C)	20V (D)	35V (V)
1.0	105							
1.5	155							
2.2	225							P
3.3	335							
4.7	475			J(8500)	J(10000)			
6.8	685		J(5200)	J(10000)		R		
10	106		J(4500)	J(8000)	R(3000)	P/S(2200)	T(1000)	
15	156				R(2000)	P/S		
22	226			R(3500)	K(1800)/N(3800) P/R(3800)	A/T(1000)		
33	336		R(3000)	K(1700)/(3000) R(3000)	K(1500)/P(3500) R(3500)/S(1500)	S/T		
47	476	R	K(1500)/P(3000) R(3000)	K(1500)/P(2500) S(1500)/R(3200)	A(600)/G(1500) P(3200)/S(1500) T(600)	B		
68	686	P	K(1200)/P(3000) S(1500)	A(500)/G(800) T(600)/S(1500)	A/T	B/W		
100	107	S	A(500)/G(800) S(1400)	A(500,800)/T(800)	H(900)/T(900)	W		
150	157	A	A(800)/T(800)	A(900)/H(900) T(1200)	B(500)/W(200)			
220	227	A/T(1100)	H(900)/T(1100)	B(500)/W(200)				
330	337		B*/W(200)	B				
470	477	B*/W*	B*					

Red - Developmental Ratings - subject to change

*Violet - Please Contact Manufacturer

Available Ratings, (ESR ratings in mOhms in brackets)

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 1.5V. DCL is measured at rated voltage after 5 minutes.

ESR allowed to move up to 1.25 times catalog limit post mounting.

DCL allowed to move up to 2.00 times catalog limit post mounting.

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

