

TLN PulseCap™ Series



High Capacitance Tantalum Solid Electrolytic Chip Capacitors Undertab Series



FEATURES

- Large case size for maximum capacitance
- 3x reflow 260°C compatible
- Low profile solution
- Consumer applications
(e.g. PCMCIA/USB wireless express cards etc.)
- CV range: 1000-3300µF / 4-10V
- 2 case sizes available

APPLICATIONS

- Data transfer modems
- SSD backup circuits

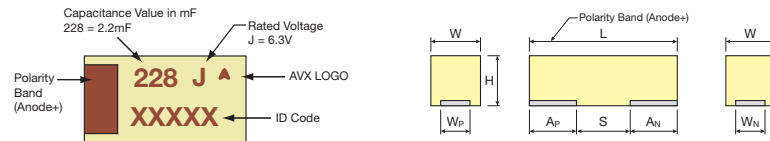


CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L±0.20 (0.008)	W±0.20 (0.008) -0.10 (0.004)	H max.	W _P ±0.10 (0.004)	W _N ±0.10 (0.004)	A _P ±0.10 (0.004)	A _N ±0.10 (0.004)	S Min.
4	2924	7361-20	7.30 (0.287)	6.10 (0.240)	2.00 (0.079)	4.75 (0.187)	4.75 (0.187)	2.00 (0.079)	3.20 (0.126)	2.10 (0.083)
6	5831	14878-20	14.80 (0.583)	7.80 (0.307)	2.00 (0.079)	5.50 (0.217)	5.50 (0.217)	2.45 (0.096)	2.45 (0.096)	9.90 (0.390)

MARKING

4, 6 CASE



HOW TO ORDER

TLN

Type

6

Case Size
See table
above

228

Capacitance Code
pF code: 1st two digits
represent significant figures,
3rd digit represents multiplier

M

Tolerance
M = ±20%

006

Rated DC Voltage
004 = 4Vdc
006 = 6.3Vdc
010 = 10Vdc

R

Packaging
R = Pure Tin 7" Reel

0055

ESR in mΩ

TECHNICAL SPECIFICATIONS

Technical Data:

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

Capacitance Range: 1000 µF to 3300 µF

Capacitance Tolerance: ±20%

Leakage Current DCL: 0.01CV

Rated Voltage (V_R) -55°C ≤ +40°C: 4 6.3 10

Category Voltage (V_C) at 85°C: 2 3.2 5

Category Voltage (V_C) at 125°C: 0.8 1.3 2

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



TLN PulseCap™ Series



High Capacitance Tantalum Solid Electrolytic Chip Capacitors Undertab Series

CAPACITANCE AND RATED VOLTAGE RANGE (FIGURE DENOTES CASE SIZE)

Capacitance		Voltage Rating DC (V_R) to 85°C		
µF	Code	4V (G)	6.3V (J)	10V (A)
680	687			
1000	108			4(100)/6(55)
1500	158		4(100)	6(55)
2200	228		6(55)	
3300	338	6(55)		

Released ratings (ESR ratings in mOhms in parentheses)

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher voltage 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)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (μA)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (mA)			MSL
									25°C	85°C	125°C	
4 Volt @ 40°C												
TLN6338M004#0055	6	3300	4	40	0.8	125	132	55	2045	1840	818	3
6.3 Volt @ 40°C												
TLN4158M006#0100	4	1500	6.3	40	1.3	125	90	100	1285	1156	514	3
TLN6228M006#0055	6	2200	6.3	40	1.3	125	132	55	2045	1840	818	3
10 Volt @ 40°C												
TLN4108M010#0100	4	1000	10	40	2	125	100	100	1285	1156	514	3
TLN6108M010#0055	6	1000	10	40	2	125	100	55	2045	1840	818	3
TLN6158M010#0055	6	1500	10	40	2	125	150	55	2045	1840	818	3

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.

ESR allowed to move up to 1.25 times catalogue limit post mounting

DCL allowed to move up to 2.00 times catalogue limit post mounting

For typical weight and composition see page 274.

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

TLN PulseCap™ Series

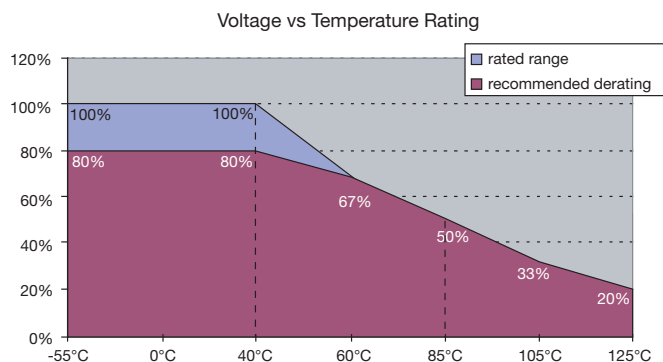


High Capacitance Tantalum Solid Electrolytic Chip Capacitors Undertab Series

QUALIFICATION TABLE

TEST	TLN PulseCap™ series (Temperature range -55°C to +125°C)									
	Condition			Characteristics						
Endurance	Apply rated voltage (Ur) at 40°C and / or category voltage (Uc) at 85°C for 2000 hours through a circuit impedance of ≤0.1Ω/V. Stabilize at room temperature for 1-2 hours before measuring.			Visual examination	no visible damage					
				DCL	2 x initial limit					
				ΔC/C	within +5/-30% of initial value					
				ESR	1.25 x initial limit					
Humidity	Store at 65°C and 90-95% relative humidity for 500 hours, with no applied voltage. Stabilize at room temperature and humidity for 1-2 hours before measuring.			Visual examination	no visible damage					
				DCL	2 x initial limit					
				ΔC/C	within ±10% of initial value					
				ESR	1.25 x initial limit					
Temperature Stability	Step	Temperature°C	Duration(min)		+20°C	-55°C	+20°C	+85°C	+125°C	+20°C
	1	+20	15							
	2	-55	15	DCL	2 x IL*	n/a	2 x IL*	20 x IL*	25 x IL*	2 x IL*
	3	+20	15							
	4	+85	15	ΔC/C	n/a	+5/-20%	±10%	+20/-0%	+25/-0%	±10%
	5	+125	15							
	6	+20	15	ESR	1.25 x IL*	2.5 x IL*	1.25 x IL*	1.25 x IL*	1.25 x IL*	1.25 x IL*
Surge Voltage	Apply 1.3x rated voltage (Ur) at 40°C for 1000 cycles of duration 6 min (30 sec charge, 5 min 30 sec discharge) through a charge / discharge resistance of 1000Ω			Visual examination	no visible damage					
				DCL	2 x initial limit					
				ΔC/C	within ±5% of initial value					
				ESR	1.25 x initial limit					
Mechanical Shock	MIL-STD-202, Method 213, Condition C			Visual examination	no visible damage					
				DCL	initial limit					
				ΔC/C	within ±5% of initial value					
				DF	initial limit					
				ESR	initial limit					
Vibration	MIL-STD-202, Method 204, Condition D			Visual examination	no visible damage					
				DCL	initial limit					
				ΔC/C	within ±5% of initial value					
				DF	initial limit					
				ESR	initial limit					

*Initial Limit

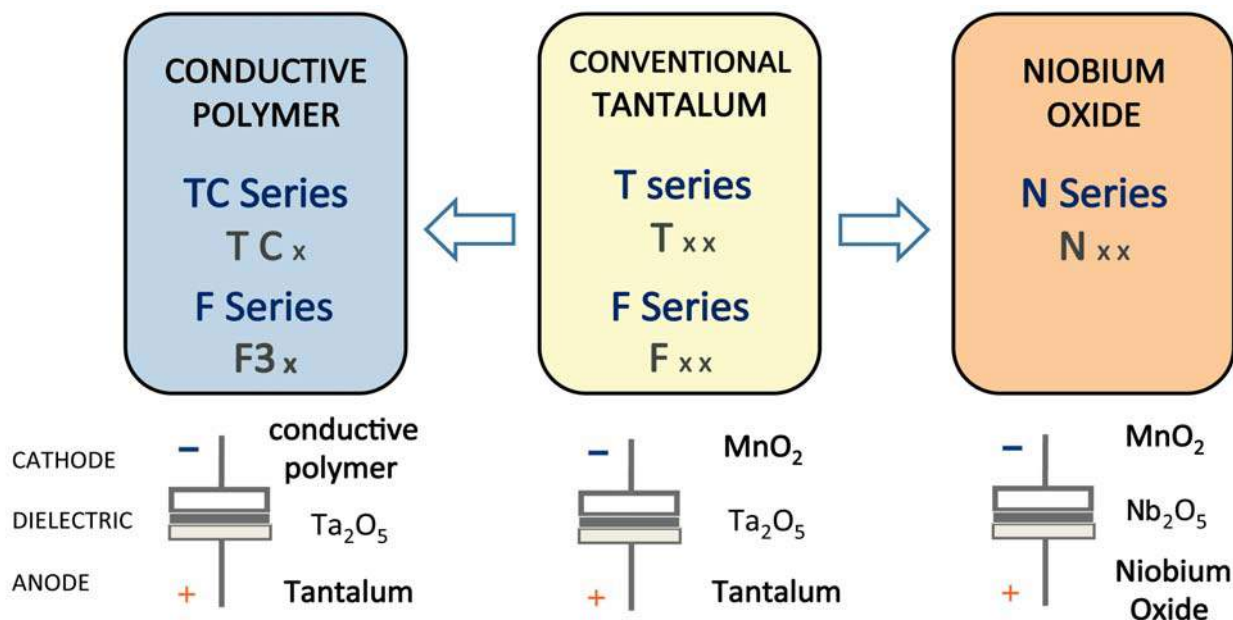


TLN PulseCap™ Series

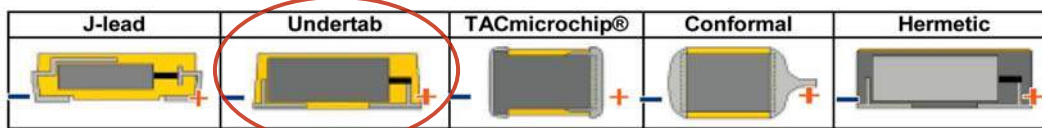


High Capacitance Tantalum Solid Electrolytic Chip Capacitors
Undertab Series

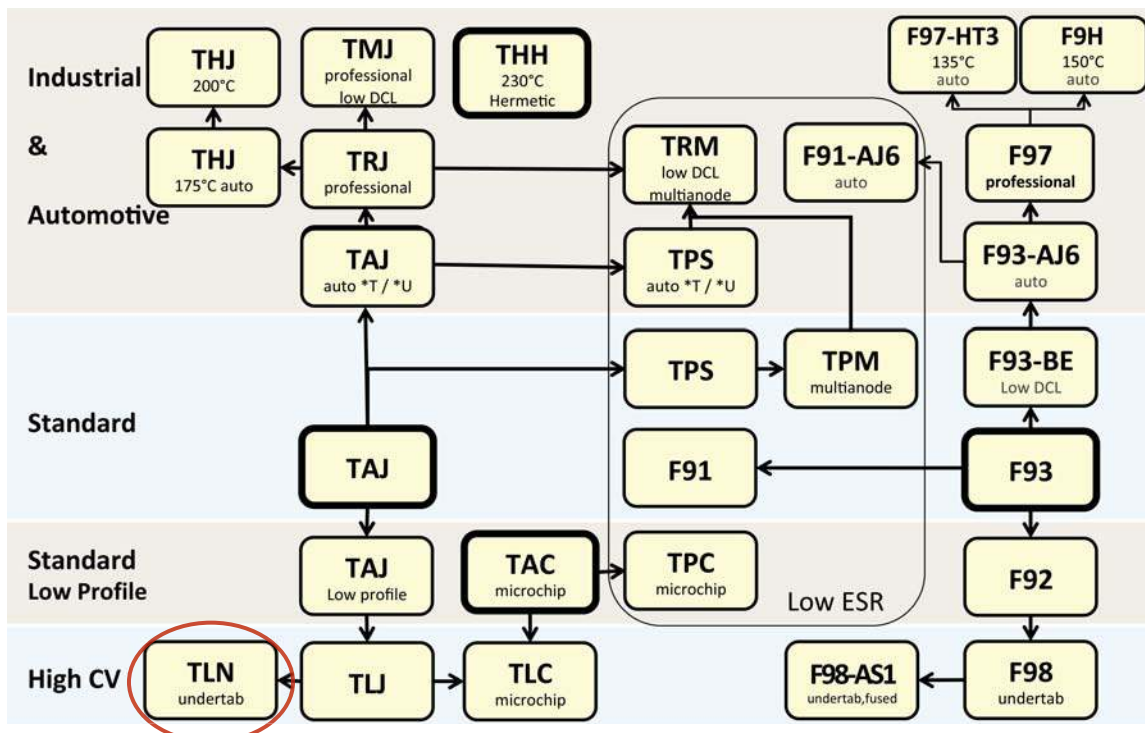
AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP



Five Capacitor Construction Styles



SERIES LINE UP: CONVENTIONAL SMD MnO_2





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.