

TLN PulseCap™ Series

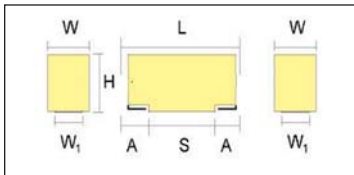


Tantalum Solid Electrolytic Chip Capacitors



TLN PulseCap™ Tantalum Capacitors offer low profile and high capacitance solution for applications where boosting power is required together with need for reduced height. Typical applications are PCMCIA/USB wireless express cards where bulk capacitance is needed to boost transmitter power. PulseCap™ provides high capacitance 2200µF in a maximum height of 2.0 mm and voltage rating 6.3V.

- High Volumetric Efficiency
- Environmentally Friendly
- 2.0mm Low Profile Cases
- 3x Reflow 260°C Compatible
- Consumer Applications



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)	W1±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)
6	1575-20	14.5 (0.571)	7.5 (0.295)	2.0 (0.079)	5.5 (0.217)	2.4 (0.094)

HOW TO ORDER

TLN

Type

6

Case Code
See table above

228

Capacitance Code
pF code

M

Tolerance
M = ±20%

006

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

R

Packaging
R = Standard

0055

ESR in mΩ

TECHNICAL SPECIFICATIONS

Technical Data:

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

Capacitance Range: 2.2 mF

Capacitance Tolerance: ±20%

Leakage Current DCL: 0.01CV

Rated Voltage (V_R) ≤ + 85°C: 4 6.3 10

Category Voltage (V_C) ≤ + 85°C: 2 3.15 5

Category Voltage (V_C) ≤ + 125°C: 0.8 1.26 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

Meets requirements of AEC-Q200

TLN PulseCap™ Series



Tantalum Solid Electrolytic Chip Capacitors

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

Capacitance		Voltage Rating DC (V_R) to 85°C		
mF	Code	4V (G)	6.3V (J)	10V (A)
1.0	108			6(55)
1.5	158			6(55)
2.2	228		6(55)	
3.3	338	6(55)		

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.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current (mA)			100kHz Ripple Voltage (mV)		
						25°C	85°C	125°C	25°C	85°C	125°C
4 Volt @ 40°C (2V @ 85°C, 0.8V @ 125°C)											
TLN6338M004#0055	6	3300	4	132	55	2045	1840	818	112	101	45
6.3 Volt @ 40°C (3.15V @ 85°C, 1.26V @ 125°C)											
TLN6228M006#0055	6	2200	6.3	132	55	2045	1840	818	112	101	45
10 Volt @ 40°C (5V @ 85°C, 2V @ 125°C)											
TLN6108M010#0055	6	1000	10	100	55	2045	1840	818	112	101	45
TLN6158M010#0055	6	1500	10	150	55	2045	1840	818	112	101	45

Engineering samples - please contact manufacturer

- Insert R for standard packaging

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

TLN PulseCap™ series is MSL level 3 device according to J-STD-020C.

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.

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

