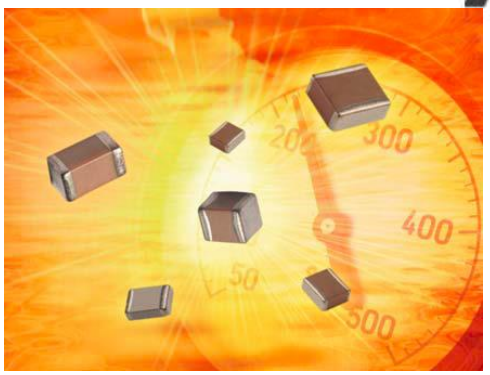
AT Series Extension

High Temperature MLCC 250°C Rated



Basic Overview

AVX's new range extension for the high temperature chip capacitor product line, with verified capability of long-term operation up to 250°C is a response to both military and commercial business needs. The new capacitors demonstrate high current handling capabilities, high volumetric efficiency, high insulation resistance and low ESR/ESL.

Positioning

AVX AT Series product has been designed for the most demanding applications, such as "down-hole" oil exploration, aerospace programs and "under-hood" electronics.

Applications

- DC filters in motor drives
- High-pulsed current circuitry
- Down-Hole Oil Exploration
- Space and aerospace electronics
- Hybrid Automotive
- DC Filtering of high frequency ripple currents.
- Decoupling and bypass capacitors
- DC/DC Converters (Power Conditioning)
- DC current sensing and DC subsystems
- AC/DC Converters

Top Selling Points

- Added 0603 and 0805 case sizes (0603 – 2225 sizes now available)
- Added additional C0G and VHT temperature coefficients to differentiate 200C from 250C rated offering
- Capacitance Range now spans 100pF – 1µF
- Voltage Range now spans 16V – 50V
- High current handling capabilities
- High volumetric efficiency
- High insulation resistance
- Low ESR / ESL
- Low parasitics and low DC leakage current for circuit stability and efficiency
- Excellent high frequency performance
- Excellent capacitance retention with frequency

Unique Features

- High temperature capabilities up to 250°C
- Capacitance Range: 100pF to 1µF
- Voltage Range: 16V to 50V
- Dielectric: C0G(NP0), VHT(X7R) 200&250C rated
- See datasheet for size and dimensions

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How to Order

AT10	3	T	104	K	A	T	2	A
AVX Style	**Voltage Code**	**Temperature Coefficient**	**Capacitance Code** (2 significant digits + no. of zeros)	**Capacitance Tolerance**	**Test Level**	**Termination**	**Packaging**	**Special Code**
AT03 = 0603 AT05 = 0805 AT06 = 1206 AT10 = 1210 AT12 = 1812 AT14 = 2225	16V = Y 25V = 3 50V = 5	C0G 250ºC = A C0G 200ºC = 2 VHT 250ºC = T VHT 200ºC = 4 (Class II)	101 = 100pF 102 = 1nF 103 = 10nF 104 = 100nF 105 = 1µF	J = ±5% K = ±10% M = ±20%	A = Standard	1 = Pd/Ag T = 100% Sn Plated (RoHS Compliant)	2 = 7" Reel 4 = 13" Reel 9 = Bulk	A = Standard

Series Cross

AVX Series	Competitor	Competitor Series
AT	PRESIDIO	RT/HT
	KEMET	HT/HP

FAQ's

Q: What is the temperature range for these AT Series products?
A: -55°C to 250°C

Q: What temperature is the voltage rating specified at?
A: Voltage rating specified at 250°C

Q: Which dielectrics are available?
A: C0G (NP0) and VHT (X7R) in both 200°C and 250°C ratings

Contact Information

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