

MOLDING SMD ULTRA POWER INDUCTORS

Series AP *Alloy mode mini size*



FEATURES

- ◆ This specification applies Low Profile Power Inductors.
- ◆ 100% Lead(Pb) & Halogen-Free and RoHS compliant.

APPLICATION

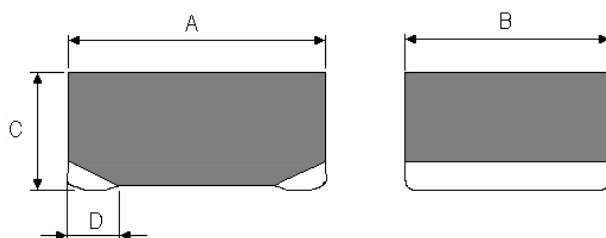
- ◆ For Mobile and Notebook and PDA...etc..

PRODUCT IDENTIFICATION

$\frac{AP}{a}$ $\frac{16}{b}$ $\frac{A}{c}$ $\frac{10}{d}$ $\frac{A}{e}$ $\frac{M}{f}$ $\frac{1U}{g}$

- a : Type of products - Power Inductors
- b : Dimension(mm) - 20 : 2.5X2.0, 16 : 2.0X1.6
- c : Design code - A : A Series, B : B Series
- d : Thickness (mm) - 10 = 1.0, 12 = 1.2
- e : Packing - PCS/REEL - 3 = 3000
- f : Tolerance - M : ±20%
- g : Inductance - 470N = 0.47uH, 1U = 1.0 uH

SHAPES & DIMENSIONS



Unit : mm

Parts	A	B	C (max.)	D
AP16A10	2.0±0.3	1.6±0.3	1.0	0.5±0.3
AP16B16	2.0±0.3	1.6±0.3	1.0	0.5±0.3
AP20A10	2.5±0.3	2.0±0.3	1.0	0.5±0.3
AP20B10	2.5±0.3	2.0±0.3	1.0	0.6±0.3
AP20A12	2.5±0.3	2.0±0.3	1.2	0.5±0.3

PACKING QUANTITY

Parts	Quantity (PCS/Reel)
AP16A10	3000
AP16B16	3000
AP20A10	3000
AP20B10	3000
AP20A12	3000

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Series AP Alloy mode mini size ELECTRICAL CHARACTERISTICS

Parts No.	Inductance (μ H) at 1V/1MHz	DCR (Ω)		I sat (A)		I rms (A)	
		max.	typ.	max.	typ.	max.	typ.
AP16A103M 470N	0.47 \pm 20%	0.039	0.029	4.00	4.50	3.50	3.80
AP16A103M 680N	0.68 \pm 20%	0.056	0.046	3.10	3.50	3.00	3.30
AP16A103M 1U	1.00 \pm 20%	0.065	0.054	2.70	3.00	2.70	2.90
AP16A103M 2U2	2.20 \pm 20%	0.125	0.104	2.20	2.50	2.00	2.20
AP16A103M 3U3	3.30 \pm 20%	0.167	0.139	1.70	1.90	1.70	1.90
AP16A103M 4U7	4.70 \pm 20%	0.260	0.198	1.40	1.60	1.40	1.60
AP16B103M 240N	0.24 \pm 20%	0.022	0.018	5.05	5.50	4.50	5.00
AP16B103M 330N	0.33 \pm 20%	0.033	0.027	4.50	5.00	3.70	4.00
AP16B103M 470N	0.47 \pm 20%	0.045	0.037	4.00	4.40	3.15	3.50
AP16B103M 680N	0.68 \pm 20%	0.054	0.045	3.30	3.60	3.00	3.30
AP16B103M 1U	1.00 \pm 20%	0.077	0.064	2.60	2.90	2.25	2.50
AP16B103M 1U5	1.50 \pm 20%	0.144	0.120	2.25	2.40	1.65	1.90
AP16B103M 2U2	2.20 \pm 20%	0.173	0.144	1.70	1.90	1.50	1.70
AP20A103M 470N	0.47 \pm 20%	0.048	0.040	4.00	4.50	3.20	3.60
AP20A103M 680N	0.68 \pm 20%	0.070	0.058	3.70	4.00	2.90	3.20
AP20A103M 1U	1.00 \pm 20%	0.079	0.066	2.70	3.00	2.50	2.70
AP20A103M 2U2	2.20 \pm 20%	0.168	0.140	1.90	2.10	1.50	1.80
AP20A103M 4U7	4.70 \pm 20%	0.324	0.270	1.30	1.50	1.10	1.30
AP20B103M 330N	0.33 \pm 20%	0.028	0.023	5.50	6.00	4.00	4.40
AP20B103M 470N	0.47 \pm 20%	0.032	0.026	5.00	5.50	3.70	4.00
AP20B103M 680N	0.68 \pm 20%	0.043	0.035	4.30	4.70	3.40	3.70
AP20B103M 820N	0.82 \pm 20%	0.054	0.045	4.30	4.80	2.50	2.80
AP20B103M 1U	1.00 \pm 20%	0.064	0.051	3.60	4.00	3.00	3.30
AP20B103M 1U5	1.50 \pm 20%	0.092	0.076	2.35	2.60	2.25	2.50
AP20B103M 2U2	2.20 \pm 20%	0.130	0.108	2.15	2.30	2.05	2.30
AP20B103M 3U3	3.30 \pm 20%	0.210	0.175	1.90	2.20	1.30	1.50
AP20B103M 4U7	4.70 \pm 20%	0.257	0.214	1.80	2.00	1.20	1.40
AP20A123M 330N	0.33 \pm 20%	0.024	0.020	5.70	6.40	4.30	4.80
AP20A123M 470N	0.47 \pm 20%	0.039	0.029	4.00	4.50	3.50	3.80
AP20A123M 680N	0.68 \pm 20%	0.056	0.046	3.10	3.50	3.00	3.30
AP20A123M 820N	0.82 \pm 20%	0.038	0.032	3.90	4.40	3.40	3.80
AP20A123M 1U	1.00 \pm 20%	0.065	0.054	2.70	3.00	2.70	2.90
AP20A123M 1U5	1.50 \pm 20%	0.065	0.054	2.80	3.20	2.70	3.10
AP20A123M 2U2	2.20 \pm 20%	0.125	0.104	2.20	2.50	2.00	2.20
AP20A123M 3U3	3.30 \pm 20%	0.167	0.139	1.70	1.90	1.70	1.90
AP20A123M 4U7	4.70 \pm 20%	0.260	0.198	1.40	1.60	1.40	1.60

Note:

I_{sat} : Based on inductance change ($\Delta L/L_0 : \leq -30\%$) @ ambient temp. 25°C

I_{rms} : Based on temperature rise ($\Delta T : 40^\circ\text{C}.$) max