

Mini Molding Power Inductors

ARLITECH ELECTRONIC CORP

EL:886-2-2999-8313

FAX:886-2-2995-7520

E-mail:sales@arlitech.com.tw



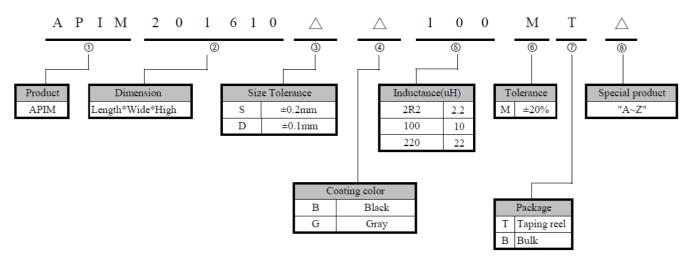
Featurs

- Metal material for large current and low loss.
- High performance (Isat) realized by metal dust core.
- Low loss realized with low Rdc.
- Closed magnetic circuit design reduces leakage flux.
- 100% lead (Pb) free meet RoHS2.0 and Halogen , Reach and other legal and regulatory requirements standard.

Applications

- DC/DC converters.
- Pad,Smart phone.
- Portable gaming devices, Smart wear, Wi-Fi module.
- Notebooks, VR, AR.
- LCD displays, HDDs, DVCs, DSCs, etc.
- Baseband power supply, Amplifier, Power management, Module power supply, Camera power manageme.

■ PRODUCT IDENTIFICATION

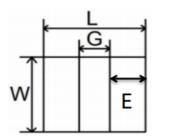


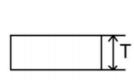


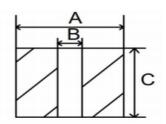
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SHAPE & DIMENSIONS (UNIT:mm)

Recommend Land Pattern







Series	L	G	W	E	T	A	В	C
APIM160808S	1.6±0.2	0.6 ± 0.2	0.8 ± 0.2	0.50 ± 0.2	0.80Max.	1.70	0.50	0.90
APIM252010S	2.5 ± 0.2	0.8 ± 0.2	2.0 ± 0.2	0.85 ± 0.2	1.00Max.	2.60	0.70	2.10

Marking No Marking

◆ APIM252010 Series Specification:

P/N	L0(µH) @ (0A)	Rdc(mΩ)		Heat rating current Irms(A)		Saturation current Isat(A)	
	1MHz	Typical	Max	Typical	Max	Typical	Max
APIM252010SBR24MT	0.24	12	17.5	6.7	6.4	8.5	7.8
APIM252010SBR33MT	0.33	13	19	6.5	6.2	7.6	7.2
APIM252010SBR47MT	0.47	15	22	6.1	5.6	6.9	6.5
APIM252010SBR68MT	0.68	23	27	5.6	5.0	5.9	5.5
APIM252010SB1R0MT	1.0	25	30	4.5	4.1	5.3	4.8
APIM252010SB1R5MT	1.5	45	55	3.4	3.0	4.3	3.9
APIM252010SB2R2MT	2.2	62	70	2.4	2.1	3.3	3.0
APIM252010SB3R3MT	3.3	86	100	2.5	2.1	2.8	2.5
APIM252010SB4R7MT	4.7	160	180	2.0	1.6	2.6	2.0
APIM252010SB6R8MT	6.8	270	320	1.6	1.4	2.4	1.9
APIM252010SB100MT	10	500	560	1.05	0.95	1.55	1.4

NOTE:

- \bullet All test data is referenced to 25 $^\circ\!\mathbb{C}$ ambient.
- Test Condition:1MHz, 1.0Vrms.
- Isat:DC current (A) that will cause L0 to drop approximately 30%.
- Operating Temperature Range -55℃ to + 125℃.
- The part temperature (ambient + temp rise) should not exceed 125 under °C the worst case operating conditions.

Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

• The rated current as listed is either the saturation current or the heating current depending on which value is lower.

♦ APIM160808 Series Specification:

P/N	L0(µH) @ (0A) 1MHz	Rdc(mΩ)		Heat rating current Irms(A)		Saturation current Isat(A)	
		Typical	Max	Typical	Max	Typical	Max
APIM160808SBR24MT	0.24	34	41	3.3	2.9	5.3	4.8
APIM160808SBR47MT	0.47	80	100	2.6	2.3	4.1	3.7
APIM160808SBR56MT	0.56	85	110	2.2	1.9	4.0	3.5
APIM160808SBR68MT	0.68	110	130	2.1	1.9	3.3	3.0
APIM160808SB1R0MT	1.0	180	200	2.1	1.8	3.0	2.6
APIM160808SB1R5MT	1.5	240	285	1.7	1.4	2.4	2.0
APIM160808SB2R2MT	2.2	220	260	1.4	1.2	1.5	1.3
APIM160808SB3R3MT	3.3	500	600	1.0	0.9	1.4	1.2
APIM160808SB4R7MT	4.7	585	700	1.0	0.8	1.2	1.0
APIM160808SB100MT	10	1450	1600	0.5	0.45	0.8	0.7

- Test Condition:1MHz, 1.0Vrms.
- Irms:DC current (A) that will cause an approximate \triangle T of 40 $^{\circ}$ C .
 Isat:DC current (A) that will cause L0 to drop approximately 30%.

- The part temperature (ambient + temp rise) should not exceed 125 under [∞] the worst case operating conditions.

Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

• The rated current as listed is either the saturation current or the heating current depending on which value is lower.