

SMD Power Inductors / AQH_MK Series

Features

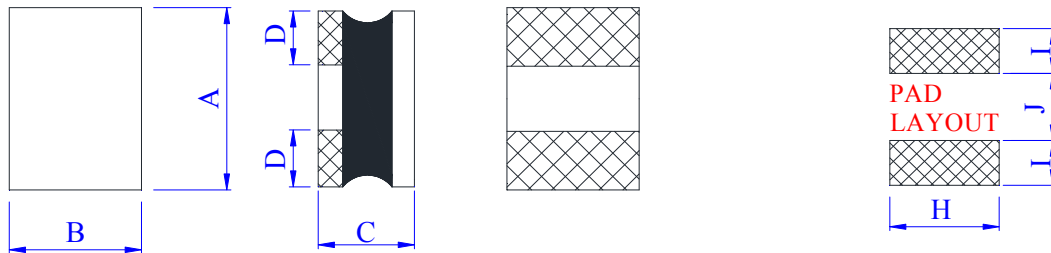
- RoHS compliant.
- Low DC resistance and high current.
- Highly accurate dimensions.
- Superior EMI characteristics with ultra low radiation comparing to conventional shielded power inductors.
- Halogen free.

Applications

- LCD Displays.
- Smartphone.
- DSC.
- Tablet PC and other protable devices.
- DC/DC converters.



Shape & Dimensions

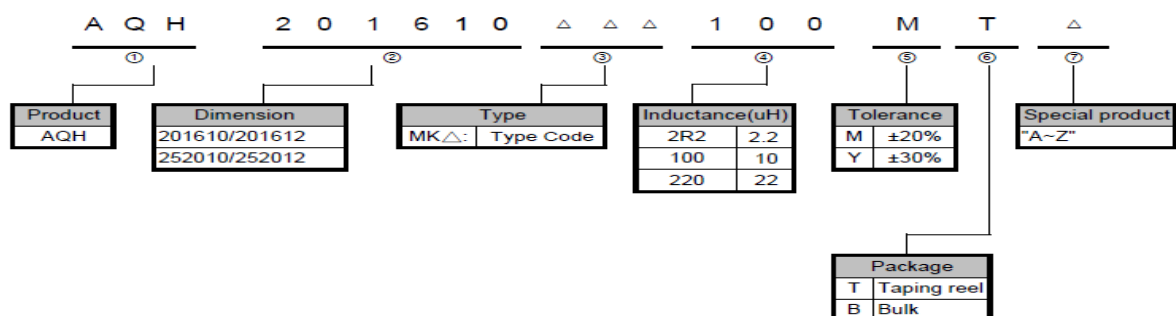


TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AQH201610MK	2.0+0.3/-0.1	1.6+0.3/-0.1	*1 1.15 MAX	0.6 Typ.	1.8	0.8	0.8
	2.0+0.3/-0.1	1.6+0.3/-0.1	*2 1.1 MAX.	0.6 Typ.	1.8	0.8	0.8
AQH201612MK	2.0+0.3/-0.1	1.6+0.3/-0.1	1.2 MAX.	0.6 Typ.	1.8	0.8	0.8
AQH252010MK	2.5+0.3/-0.1	2.0+0.3/-0.1	*3 1.0±0.05	0.8 Typ.	2.4	1.05	0.8
	2.5+0.3/-0.1	2.0+0.3/-0.1	*4 1.0 MAX.	0.8 Typ.	2.4	1.05	0.8
AQH252012MK	2.5+0.3/-0.1	2.0+0.35/-0.05	1.25 MAX.	0.8 Typ.	2.4	1.05	0.8

*1)R47~1R0=1.15 MAX. *2)1R5~100=1.1 MAX.

*3)R24~1R0=1.0±0.05 *4)1R5~150=1.0 MAX.

PRODUCT IDENTIFICATION



◆ AQH201610MK Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (KHz)	DCR ($m\Omega$) Max.	Saturation Current (A)Max.	Temp. Rise current (A)Max.
AQH201610MKR47□T	0.47	Y	100	70	2.30	2.20
AQH201610MKR68□T	0.68	Y	100	82	1.95	2.05
AQH201610MK1R0□T	1.0	Y	100	120	1.50	1.50
AQH201610MK1R5□T	1.5	Y	100	174	1.35	1.40
AQH201610MK2R2□T	2.2	M,Y	100	205	1.10	1.20
AQH201610MK3R3□T	3.3	M,Y	100	335	0.90	0.88
AQH201610MK4R7□T	4.7	M,Y	100	479	0.77	0.90
AQH201610MK6R8□T	6.8	M,Y	100	816	0.70	0.52
AQH201610MK100□T	10	M,Y	100	912	0.55	0.45

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$.($T_a = 25^{\circ}\text{C}$)

◆ AQH201612MK Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A)Max.	Temp. Rise current (A)Max.
AQH201612MK1R0□T	1.0	M,Y	1.0	100	1.80	1.80
AQH201612MK2R2□T	2.2	M,Y	1.0	190	1.35	1.30
AQH201612MK3R3□T	3.3	M,Y	1.0	300	1.20	1.20
AQH201612MK4R7□T	4.7	M,Y	1.0	450	0.88	0.80
AQH201612MK6R8□T	6.8	M,Y	1.0	540	0.76	0.70
AQH201612MK100□T	10	M,Y	1.0	860	0.58	0.50

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$.($T_a = 25^{\circ}\text{C}$)

◆ AQH252010MK Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) Max.	Saturation Current (A)Max.	Temp. Rise current (A)Max.
AQH252010MKR24□T	0.24	Y	1.0	34	3.50	2.65
AQH252010MKR33□T	0.33	Y	1.0	44	3.40	2.40
AQH252010MKR47□T	0.47	Y	1.0	45	2.40	2.30
AQH252010MKR68□T	0.68	Y	1.0	47	2.30	2.20
AQH252010MK1R0□T	1.0	M,Y	1.0	82	1.80	1.80
AQH252010MK1R5□T	1.5	M,Y	1.0	108	1.40	1.40
AQH252010MK2R2□T	2.2	M,Y	1.0	156	1.30	1.30
AQH252010MK3R3□T	3.3	M,Y	1.0	228	1.10	1.10
AQH252010MK4R7□T	4.7	M,Y	1.0	320	0.95	0.92
AQH252010MK6R8□T	6.8	M,Y	1.0	470	0.80	0.76
AQH252010MK100□T	10	M,Y	1.0	600	0.65	0.67
AQH252010MK150□T	15	M,Y	1.0	984	0.40	0.40

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$. ($T_a = 25^{\circ}\text{C}$)

◆ AQH252012MK Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) $\pm 30\%$	Saturation Current (A)Max.	Temp. Rise current (A)Max.
AQH252012MKR47□T	0.47	Y	1.0	31	3.70	2.60
AQH252012MKR68□T	0.68	Y	1.0	40	2.90	2.60
AQH252012MK1R0□T	1.0	M,Y	1.0	50	2.25	2.16
AQH252012MK1R5□T	1.5	M,Y	1.0	68	1.75	2.07
AQH252012MK2R2□T	2.2	M,Y	1.0	80	1.62	1.62
AQH252012MK3R3□T	3.3	M,Y	1.0	130	1.30	1.35
AQH252012MK4R7□T	4.7	M,Y	1.0	190	0.99	0.99
AQH252012MK6R8□T	6.8	M,Y	1.0	300	0.85	0.72
AQH252012MK100□T	10	M,Y	1.0	385	0.79	0.63
AQH252012MK150□T	15	M,Y	1.0	570	0.61	0.55
AQH252012MK220□T	22	M,Y	1.0	810	0.49	0.47

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 30% from its value without current.

* Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$. ($T_a = 25^{\circ}\text{C}$)