

## SMD POWER INDUCTORS / AQH MF Type Series

### • Features

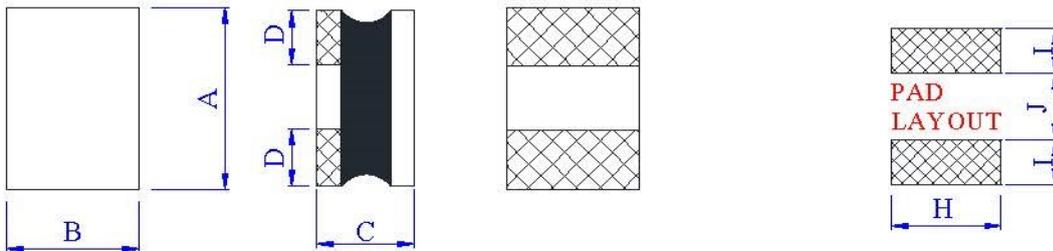
1. RoHS compliant
2. Low DC resistance and high current
3. Highly accurate dimensions
4. Superior EMI characteristics with ultra low radiation comparing to conventional shielded power inductors
5. Halogen free



### • Applications

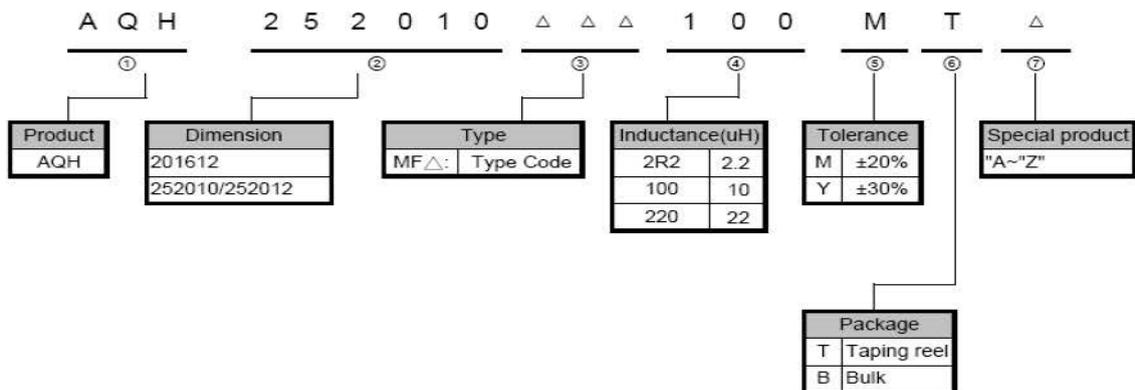
1. LCD Displays
2. Smart Phone
3. DSC
4. Tablet PC and other portable devices
5. DC/DC converters

### • Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	D (mm)	H (Ref.)	I (Ref.)	J (Ref.)
AQH201612MF	2.0 ± 0.25	1.6 ± 0.25	1.2 ± 0.05	0.6 Typ.	1.8	0.80	0.8
AQH252010MF	2.5 ± 0.25	2.0 ± 0.25	1.0 MAX.	0.8 Typ.	2.2	0.85	0.8
AQH252012MF	2.5 ± 0.25	2.0 ± 0.25	1.2 ± 0.05	0.8 Typ.	2.2	0.85	0.8

### ■ PRODUCT IDENTIFICATION



## ◆ AQH201612MF Series Specification :

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (MHz)	DCR ( $\Omega$ ) $\pm 30\%$	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AQH201612MFR47□T	0.47	M,Y	1.0	0.051	2.43	2.07
AQH201612MFR68□T	0.68	M,Y	1.0	0.074	1.98	1.80
AQH201612MF1R5□T	1.5	M,Y	1.0	0.130	1.44	1.30
AQH201612MF6R8□T	6.8	M,Y	1.0	0.465	0.73	0.70

### NOTE :

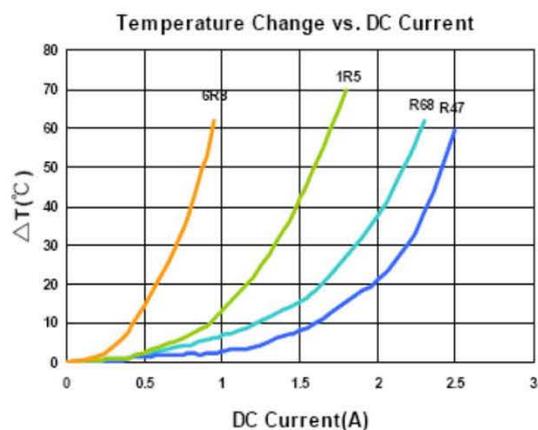
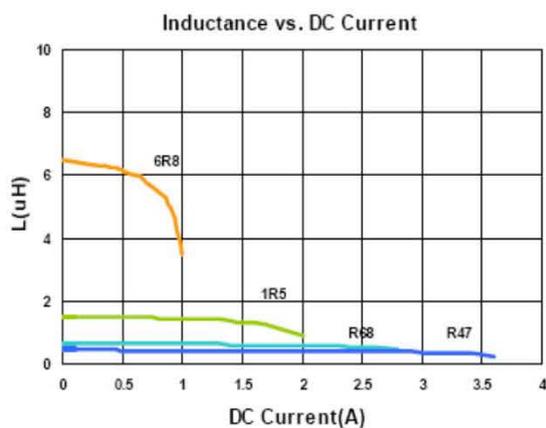
\* The operating temperature range is  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ (Including self-temperature rise)

\* □ 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  $\Delta T \leq 40^{\circ}\text{C}$  .( $T_a = 25^{\circ}\text{C}$ )

### ■ Electrical Characteristics



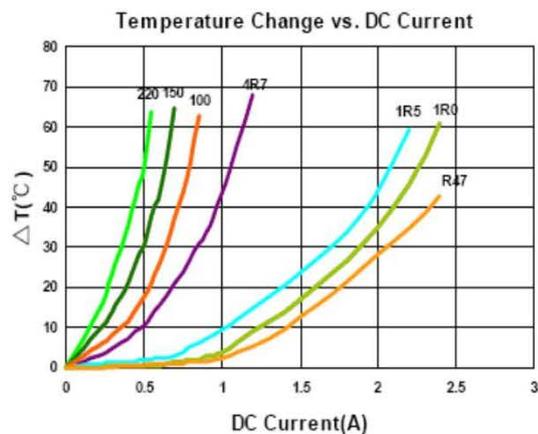
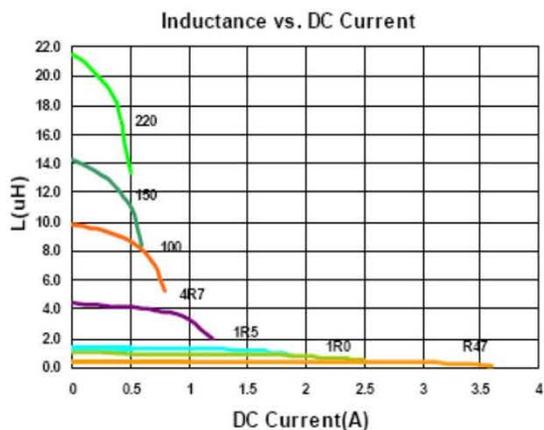
## ◆ AQH252010MF Series Specification :

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (MHz)	DCR ( $\Omega$ ) $\pm 30\%$	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AQH252010MFR47□T	0.47	M,Y	1.0	0.045	2.52	2.07
AQH252010MF1R0□T	1.0	M,Y	1.0	0.066	1.78	1.84
AQH252010MF1R5□T	1.5	M,Y	1.0	0.095	1.53	1.66
AQH252010MF4R7□T	4.7	M,Y	1.0	0.285	0.82	0.85
AQH252010MF100□T	10	M,Y	1.0	0.535	0.54	0.63
AQH252010MF150□T	15	M,Y	1.0	0.810	0.45	0.49
AQH252010MF220□T	22	M,Y	1.0	1.200	0.36	0.39

### NOTE :

- \* The operating temperature range is  $-40^{\circ}\text{C}$  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  $\Delta T \leq 40^{\circ}\text{C}$  .( $T_a = 25^{\circ}\text{C}$ )

### ■ Electrical Characteristics



## ◆ AQH252012MF Series Specification :

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (MHz)	DCR ( $\Omega$ ) $\pm 30\%$	Saturation Current (A) Max.	Temp. Rise current (A) Max.
AQH252012MFR50□T	0.5	M,Y	1.0	0.028	3.15	2.70
AQH252012MF1R0□T	1.0	M,Y	1.0	0.050	2.25	2.16
AQH252012MF1R2□T	1.2	M,Y	1.0	0.053	1.89	2.11
AQH252012MF1R5□T	1.5	M,Y	1.0	0.068	1.75	2.07
AQH252012MF2R2□T	2.2	M,Y	1.0	0.080	1.62	1.62
AQH252012MF3R3□T	3.3	M,Y	1.0	0.130	1.30	1.35
AQH252012MF4R7□T	4.7	M,Y	1.0	0.190	0.99	0.99
AQH252012MF5R6□T	5.6	M,Y	1.0	0.210	0.94	0.90
AQH252012MF6R8□T	6.8	M,Y	1.0	0.300	0.85	0.72
AQH252012MF100□T	10	M,Y	1.0	0.385	0.79	0.63
AQH252012MF150□T	15	M,Y	1.0	0.570	0.61	0.55
AQH252012MF220□T	22	M,Y	1.0	0.810	0.49	0.47

### NOTE :

\* The operating temperature range is  $-40^{\circ}\text{C}$  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  $\Delta T \leq 40^{\circ}\text{C}$ . ( $T_a = 25^{\circ}\text{C}$ )

### ■ Electrical Characteristics

