

FEATURES

- Small chip suitable for surface mounting .
- Large inductance with ferrite material .
- Operating Temperature: -40°C~+85°C .
- RoHS, Halogen Free and REACH Compliance.



APPLICATIONS

- Mobile phones and other electronic devices
- Bluetooth modules and TWS earphones

PART NUMBERING

A	HW	1608	FE	4R7	K	T	F	□□
①	②	③	④	⑤	⑥	⑦	⑧	⑨
Grade	Series Name	External Dimensions	Feature Type	Nominal inductance	Inductance tolerance	Packaging	HSF Products	Design Code

① Grade	
A	Grade Code

② Series Name	
HW	Wire Wound Chip Inductor

③ External Dimensions	
1608	[0603]
2012	[0805]

④ Feature Type	
FE	Ferrite core

⑤ Nominal inductance	
Code (example)	Nominal inductance [μH]
4R7	4.7
100	10
220	22

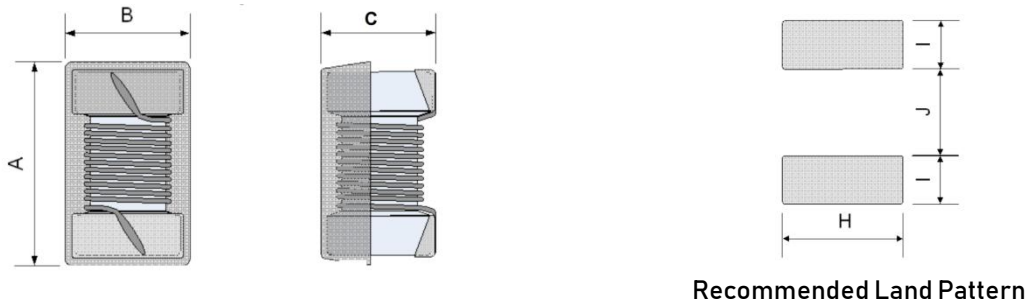
⑦ Packaging	
T	Tape & Reel

⑧ HSF Products	
F	Hazardous Substance Free Products

⑥ Inductance tolerance	
Code (example)	Inductance tolerance
J	±5%
K	±10%
M	±20%

⑨ Design Code	
□□	Standard product is blank
-M	With color point Marking

Dimensions & Recommended Land Pattern



Unit: mm

Series	Dimensions			Recommended Land Pattern		
	A Max.	B Max.	C Max.	I Typ.	H Typ.	J Typ.
AHW1608FE	1.80	1.25	1.10	0.64	1.02	0.64
AHW2012FE	2.40	1.73	1.55	1.02	1.78	0.76

● The 1608FE and 2012FE with color point Marking can be provided upon customer's request.

Electrical Characteristics

● AHW1608FE Series

Part Number	Inductance	L/Q Test Freq.	Quality Factor	Self-resonant Frequency	DC Resistance	Heat Rating Current
				Typ.	Max.	Typ.
Units	μH	MHz	-	MHz	Ω	mA
Symbol	L	Freq.	Q	S.R.F	DCR	I _{rms}
AHW1608FE1R0KTF	1	7.9	16	250	0.41	700
AHW1608FE1R5KTF	1.5	7.9	16	160	0.52	600
AHW1608FE1R8KTF	1.8	7.9	16	121	0.56	580
AHW1608FE2R2KTF	2.2	7.9	16	103	0.72	580
AHW1608FE2R7KTF	2.7	7.9	16	72	0.81	500
AHW1608FE3R9KTF	3.9	7.9	16	61	1.08	460
AHW1608FE4R7KTF	4.7	7.9	16	51	0.97	420
AHW1608FE5R6KTF	5.6	7.9	16	47	1.43	380
AHW1608FE6R8KTF	6.8	7.9	16	43	1.95	340
AHW1608FE100KTF	10	2.5	14	36	2.40	280
AHW1608FE120KTF	12	2.5	14	32	2.96	260
AHW1608FE150KTF	15	2.5	14	29	3.38	220
AHW1608FE220KTF	22	2.5	14	24	4.69	200
AHW1608FE270KTF	27	2.5	14	20	6.76	140
AHW1608FE330KTF	33	2.5	14	15	8.58	120

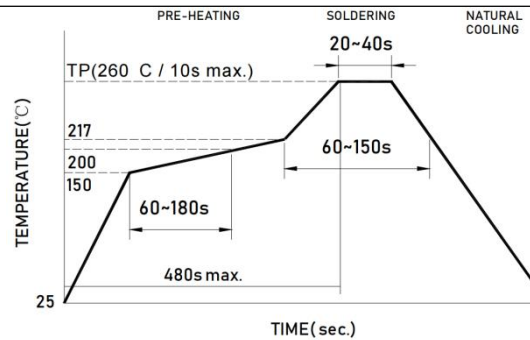
Electrical Characteristics

● AHW2012FE Series

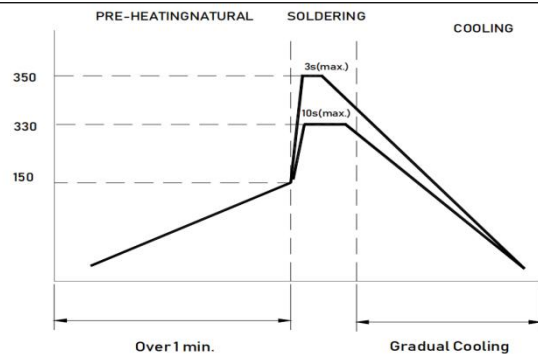
Part Number	Inductance	L/Q Test Freq.	Quality Factor	Self-resonant Frequency	DC Resistance	Heat Rating Current
				Typ.	Max.	Typ.
Units	μH	MHz	-	MHz	Ω	mA
Symbol	L	Freq.	Q	S.R.F	DCR	Irms
AHW2012FER68KTF	0.68	7.9	14	765	0.19	1480
AHW2012FE1R0KTF	1	7.9	14	208	0.17	1350
AHW2012FE1R2KTF	1.2	7.9	14	208	0.17	1180
AHW2012FE1R5KTF	1.5	7.9	14	130	0.22	1080
AHW2012FE1R8KTF	1.8	7.9	14	112	0.26	1060
AHW2012FE2R2KTF	2.2	7.9	12	80	0.31	1040
AHW2012FE3R3KTF	3.3	7.9	12	50	0.36	870
AHW2012FE4R7KTF	4.7	7.9	14	51	0.56	840
AHW2012FE5R6KTF	5.6	7.9	12	42	0.65	640
AHW2012FE6R8KTF	6.8	7.9	14	35	0.88	700
AHW2012FE8R2KTF	8.2	7.9	13	33	0.94	570
AHW2012FE100KTF	10	2.5	14	25	1.17	560
AHW2012FE120KTF	12	2.5	14	30	1.50	390
AHW2012FE150KTF	15	2.5	15	28	1.82	380
AHW2012FE180KTF	18	2.5	15	27	2.01	360
AHW2012FE220KTF	22	2.5	15	20	2.29	340
AHW2012FE470KTF	47	2.5	14	15	4.42	280

Soldering Conditions

- Preheat circuit and products to 150 °C
- 260 °C tip temperature (max)
- Reflow times: no more than 2 times
- Solder paste thickness: the best 0.08mm is ,but max is 0.1mm



- Use a 20 watt soldering iron with tip diameter of 1.0mm
- Limit soldering time to 3 sec.



Note:
This series product is not applies in automotive or related products. Otherwise, we will shall not bear than the resulting all the problems of quality and responsibility.

Please be sure to request approval specifications that provide further details of the products. Kindly not that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without APV approval.