

Thin Film Power Inductor:HTF Series

HTF series is a thin-film type multilayer power inductor with low AC loss.

Applications

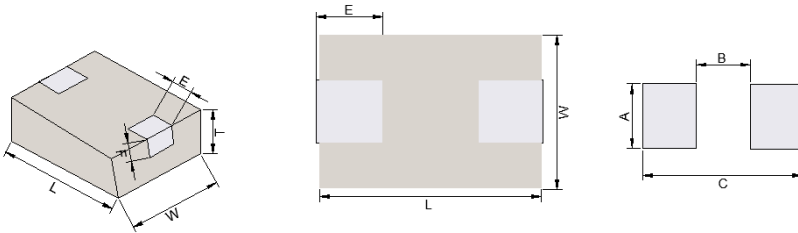
- mini power module
- BT/TWS

Part number

<u>HTF</u>	<u>1006</u>	<u>R</u>	<u>XXX</u>	<u>M</u>	<u>ST</u>	<u>XX</u>
1	2	3	4	5	6	7

(1) Product Code	HTF
(2) Size Code	1.0X0.6mm
(3) Packing	R= Tape and reel
(4) Inductance Code	222=2.2uH 472=4.7uH
(5) Tolerance	M=20%
(6) Series	ST
(7) Thickness	A7=0.7mm

Dimension and Terminal Configuration:



Appearance and dimensions

Size	L (mm)	W (mm)	T (mm)	E (mm)	F(mm)
1006	1.0±0.1	0.6±0.1	0.8 Max	0.2±0.1	0.35 Type

Recommended Land Pattern:1006

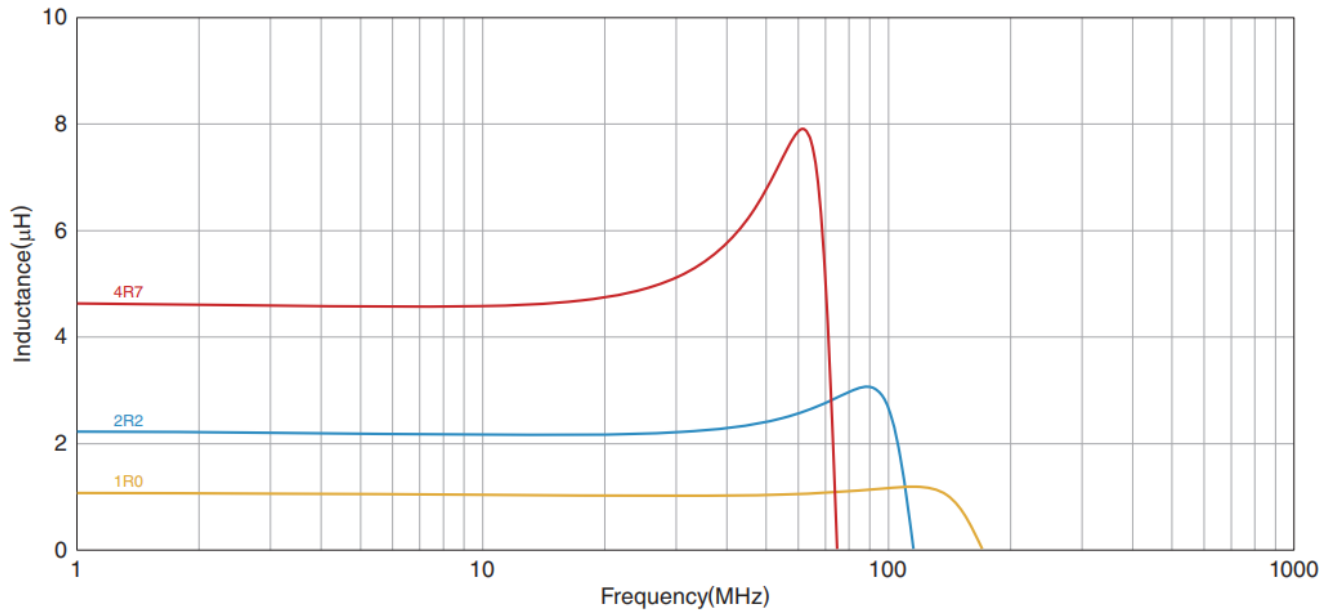
Size	A(mm)	B(mm)	C(mm)
1006	0.32	0.58	1.2

HTF 1006 ST Series

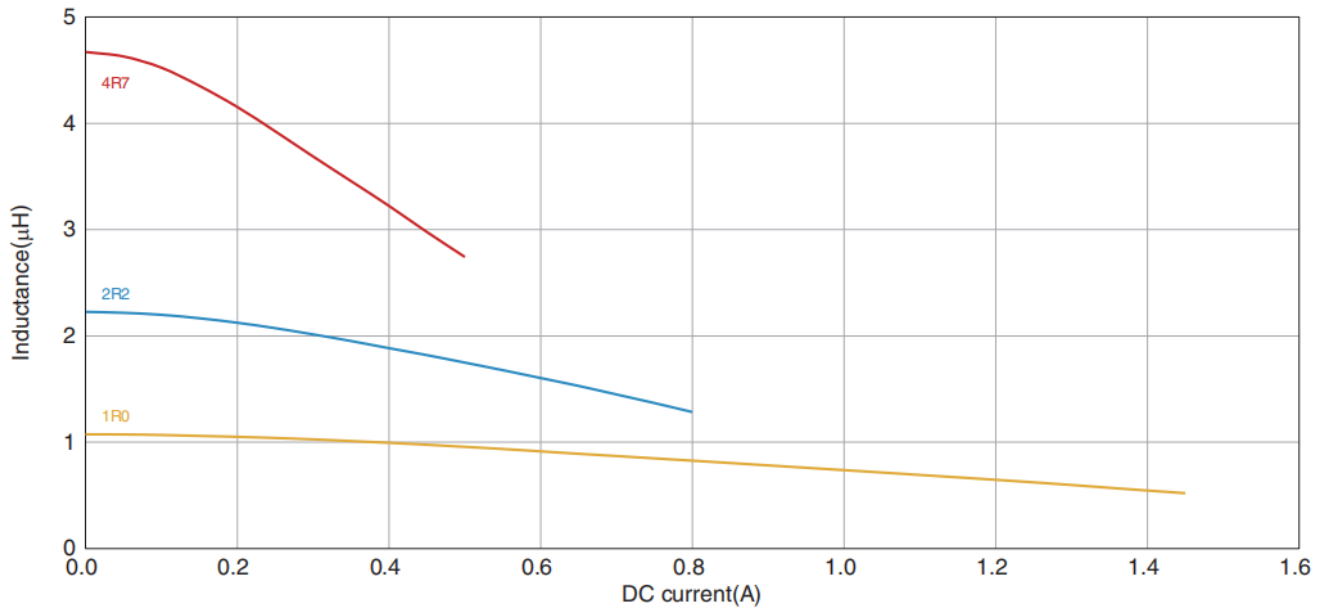
Part number	Inductance (uH)	Percent Tolerance ±%	DCR (Ω)MAX DC Resistance	Isat (A) Max Saturation Current	Irms (A) MAX Heat Rating Current
HTF1006R102MSTA7	1.0	20	0.27	0.8	1.0
HTF1006R222MSTA7	2.2	20	0.62	0.5	0.5
HTF1006R472MSTA7	4.7	20	1.10	0.3	0.4

Thin Film Power Inductor:HTF Series

L Frequency characteristics:



DC overlap characteristics of the inductor:



Electrical characteristics:

Note 1: Customized design is available, please contact us.

Note 2 : All test referenced to 26 ° C ambient.

Note 3: Inductance tolerance+/-20%.

Note 4: Inductance is measured with Agilent LCR meter E4991+16200B. Test frequency at 1MHz.

Note 5: DC resistance is measured with HIOKI micro-ohm meter RM3542-01.

Note 6: Isat means that DC current will cause a 30% inductance reduction form initial value.

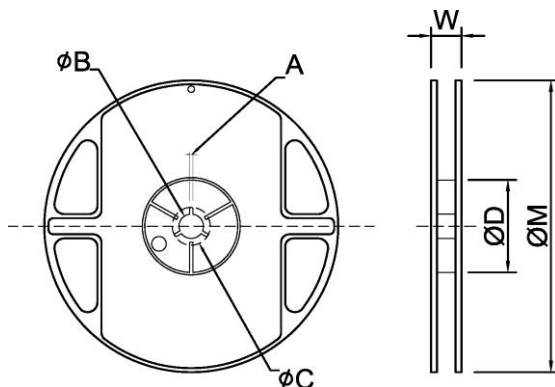
Note 7: Irms means that DC current will cause coil temp. rising to 40C whichever is smaller.

Thin Film Power Inductor:HTF Series

Taping and Reel Specifications

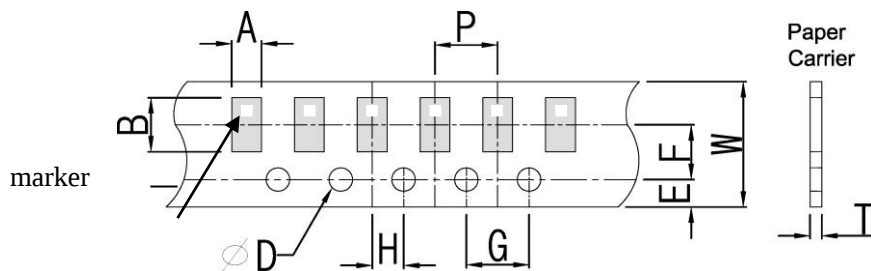
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ϕB	ϕC	ϕD	W	ϕM
1006	7"	5K/Reel	2.0 ± 0.5	13.5 ± 1.0	21 ± 1.0	60 ± 1.0	11.5 ± 2.0	178 ± 2.0

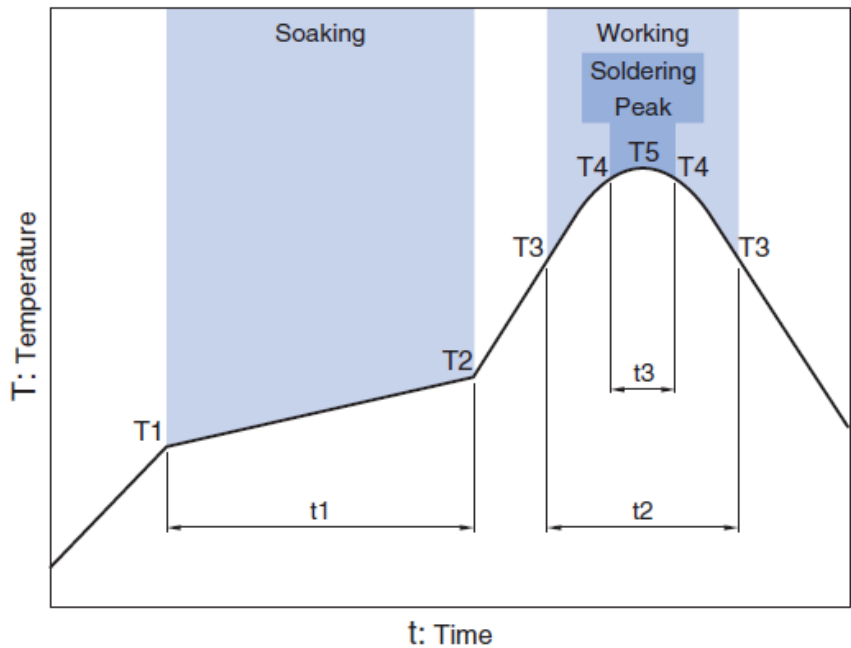
Tapping Specification



Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
Paper Type	1006	0.76	1.22	8.0 ± 0.20	1.75 ± 0.10	3.5 ± 0.05	4.0 ± 0.10	2.0 ± 0.05	0.98	$1.50^{+0.10}_{-0.0}$	2.0 ± 0.05

Thin Film Power Inductor:HTF Series
Recommended Reflow Profile

Pb free solder



Soaking			Working		Soldering		Peak
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120sec	230°C	10 to 30sec	230 to 245°C	5sec MAX	245°C Max.

Revision History

Version	Date	Description
Ver.01	NOV .2024	New issue.