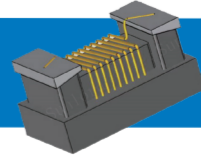


绕线片式功率电感—MWPH 系列

Wire Wound Chip Power Inductor—MWPH Series



工作温度 Operating Temp

- ◆ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self-heating)

特征 Features

- ◆ 小尺寸，可表面贴装
- ◆ 铁氧体 / 合金材料具有大电感量
- ◆ 半磁屏蔽
- ◆ Small chip suitable for surface mounting
- ◆ Large inductance with ferrite/alloy material
- ◆ Semi-magnetic shielded

用途 Applications

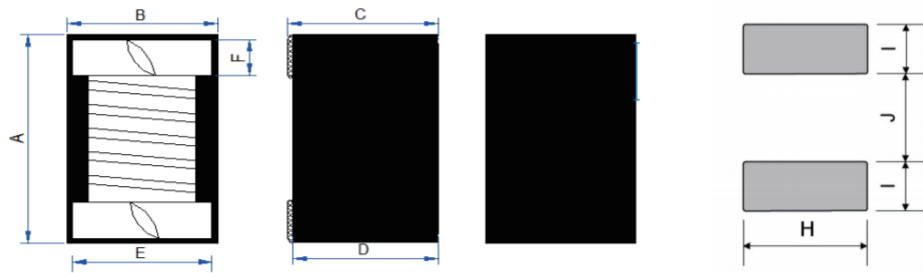
- ◆ 手机、TWS 耳机、智能手表等便携式设备
- ◆ Mobile phones, TWS headsets, smart watches and other portable devices

产品型号 Product Identification

1	2	3	4	5	6	7
MWPH	1005	A	1R0	M	T	□□□

1 分类 Type	2 外形尺寸 (L×W) (mm) External Dimensions (L×W) (mm)	3 材料代号 Material Code
MWPH 绕线片式功率电感 Wire Wound Chip Power Inductor	1005 1.1×0.6 1210 1.2×1.0 1412 1.4×1.2 1608 1.60×0.9/1.65×1.0	F Ferrite A Alloy
4 公称感量 Nominal Inductance	5 电感公差 Inductance Tolerance	6 包装 Packing
Example Nominal Value R33 0.33μH 1R0 1.0μH 4R7 4.7μH 100 10μH 220 22μH	M ±20%	T 编带 Tape & Reel
		7 设计代码 Design Code
		□□□ Design Code *Standard product is blank

外观尺寸 Shape and Dimensions



Unit: mm

Series	A	B	C	D Typ.	E Ref.	F Ref.	H Ref.	I Ref.	J Ref.
MWPH1005A	1.10±0.10	0.60±0.10	0.60±0.10	0.20	0.50	0.20	0.60	0.35	0.50
MWPH1210A	1.20±0.20	1.00±0.20	0.60 Max.	0.15	0.90	0.25	1.20	0.55	0.40
MWPH1412A	1.40±0.20	1.20±0.20	0.65 Max.	0.20	1.00	0.30	1.30	0.60	0.50
MWPH1608F	1.65±0.15	1.00±0.15	1.00±0.15	0.30	0.80	0.30	1.00	0.50	0.83
MWPH1005F-A01	1.10±0.10	0.60±0.10	0.60 Max.	0.16	0.50	0.20	0.60	0.35	0.50
MWPH1005F-A02	1.10±0.10	0.60±0.10	0.50 Max.	0.16	0.50	0.20	0.65	0.30	0.50
MWPH1608F-A01	1.60±0.15	0.90±0.15	0.60 Max.	0.16	0.76	0.30	1.00	0.50	0.83
MWPH1608F-A02	1.60±0.20	0.90±0.20	0.50 Max.	0.16	0.85	0.30	1.00	0.50	0.83

规格特性 Specifications

MWPH1005A TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	Ir	Isat
MWPH1005A1R0MT	1.0	±20%	1.0	170	1.0	380	850
MWPH1005A2R2MT	2.2	±20%	1.0	75	1.5	330	650
MWPH1005A4R7MT	4.7	±20%	1.0	60	4.0	185	400
MWPH1005A100MT	10	±20%	1.0	30	7.5	135	300
MWPH1005A150MT	15	±20%	1.0	25	10.0	120	250

MWPH1210A TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	Ir	Isat
MWPH1210AR47MT	0.47	±20%	1.0	180	0.65	660	1500
MWPH1210A1R0MT	1.0	±20%	1.0	110	1.30	440	1000
MWPH1210A1R5MT	1.5	±20%	1.0	100	2.20	330	750

MWPH1412A TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	Ir	Isat
MWPH1412AR33MT	0.33	±20%	1.0	240	0.21	1050	2800
MWPH1412AR47MT	0.47	±20%	1.0	200	0.25	1050	2650

MWPH1608F TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	Ir	Isat
MWPH1608F1R0MT	1.0	±20%	1.0	180	0.25	880	800
MWPH1608F1R5MT	1.5	±20%	1.0	140	0.28	850	650
MWPH1608F2R2MT	2.2	±20%	1.0	80	0.50	590	500
MWPH1608F4R7MT	4.7	±20%	1.0	48	0.75	490	350
MWPH1608F6R8MT	6.8	±20%	1.0	38	0.90	440	280
MWPH1608F100MT	10	±20%	1.0	30	1.20	400	250
MWPH1608F150MT	15	±20%	1.0	18	2.00	280	200
MWPH1608F220MT	22	±20%	1.0	20	3.00	220	170

MWPH1005F-A01 TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	Ir	Isat
MWPH1005F2R2MTA01	2.2	±20%	1.0	125	2.50	300	190
MWPH1005F4R7MTA01	4.7	±20%	1.0	70	3.50	220	150
MWPH1005F100MTA01	10	±20%	1.0	35	5.00	150	100

规格特性 Specifications

MWPH1005F-A02 TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	I _r	I _{sat}
MWPH1005F2R2MTA02	2.2	±20%	1.0	150	2.50	300	190
MWPH1005F4R7MTA02	4.7	±20%	1.0	70	3.50	220	150

MWPH1608F-A01 TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	I _r	I _{sat}
MWPH1608F2R2MTA01	2.2	±20%	1.0	100	1.50	300	350
MWPH1608F100MTA01	10	±20%	1.0	36	5.00	100	150

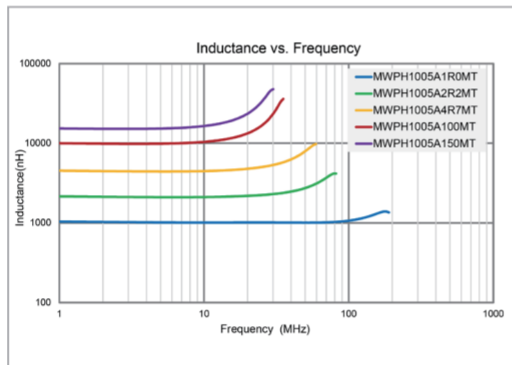
MWPH1608F-A02 TYPE

型号 Part Number	电感量 Inductance	公差 Tolerance	测试频率 L Test Freq.	自谐振频率 Min. Self-resonant Frequency	直流电阻 Max. DC Resistance	温升电流 Max. Heat Rating Current	饱和电流 Typ. Saturation Current
单位 Units	μH	-	MHz	MHz	Ω	mA	mA
符号 Symbol	L	-	Freq.	S.R.F	DCR	I _r	I _{sat}
MWPH1608F100MTA02	10	±20%	1.0	40	5.00	100	150

电气特性 Typical Electrical Characteristics

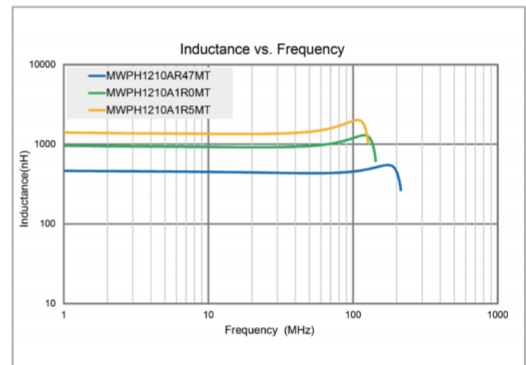
MWPH1005A TYPE

Inductance vs. Frequency Characteristics



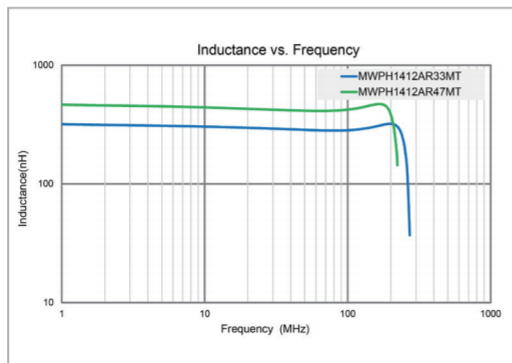
MWPH1210A TYPE

Inductance vs. Frequency Characteristics



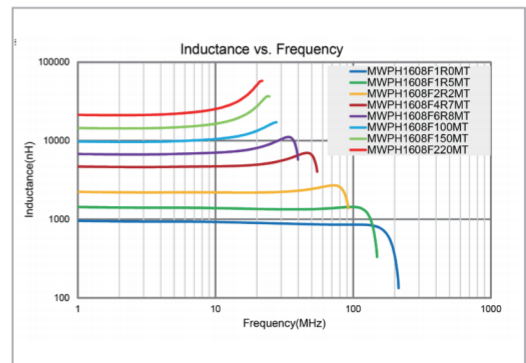
MWPH1412A TYPE

Inductance vs. Frequency Characteristics



MWPH1608F TYPE

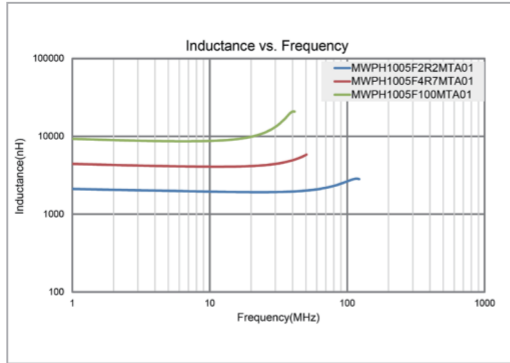
Inductance vs. Frequency Characteristics



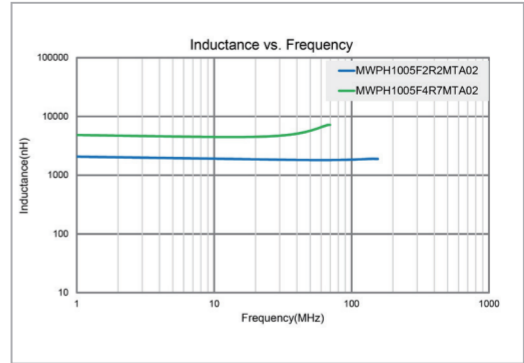
电气特性

Typical
Electrical
Characteristics

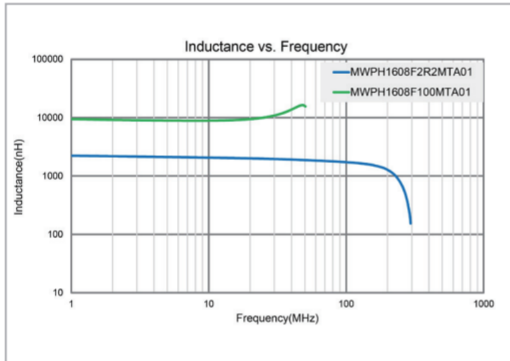
MWPH1005F-A01 TYPE
Inductance vs. Frequency Characteristics



MWPH1005F-A02 TYPE
Inductance vs. Frequency Characteristics



MWPH1608F-A01 TYPE
Inductance vs. Frequency Characteristics



MWPH1608F-A02 TYPE
Inductance vs. Frequency Characteristics

