TDK
Multilayer Ferrite chip Inductor

For High frequency
MLH2012
Multilayer Power Inductor

K tolerance

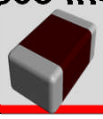
Multilayer Ferrite Power Inductor
For High Frequency

MLH2012 series

SRF
High Freq.
For SW Freq.
20 to 100MHz

Eco
Low DCR

Tolerance
K tolerance

L x W size mm (inch) / L value tolerance	1005 mm (0402 inch) 	1608 mm (0603 inch) 	2012 mm (0805 inch) 
K tolerance	**MLH1005**	**MLH1608**	**MLH2012** (22 to 47nH)
M tolerance		**MLH1608**	**MLH2012** (22 to 47nH)

TDK-EPC CORPORATION

Made in Japan

CAUTION

Please contact our Sales office when your application are considered the following:
1)The device's failure or malfunction may directly endanger human life
(e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)
製品の故障や誤動作が直接人命に係わるような機器（自動車・航空機・医療機器・原子力機器など）に本製品の使用をご検討される場合、弊社営業へご連絡ください。

Please note that solder ability may degrade in case of long-term storage.
長期保管した場合、はんだ濡れ性が劣化する可能性がありますので、ご注意願います。

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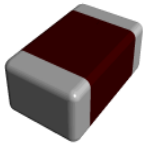
Features

Multilayer power inductor for High frequency.
Inductance is 22 to 47nH.
Completely lead-free product and support lead-free solder.



MLH series

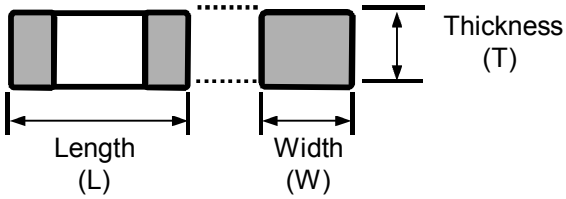
Application

The choke coil of power circuit usage.
Especially, PA, mobile phone .

Dimensions

(in mm)

Series	L (mm)	W (mm)	T (mm)
MLH1608	1.6 +/-0.15	0.80 +/- 0.15	0.95 Max
MLH2012	2.0 +/- 0.20	1.25 +/- 0.20	0.95 Max



Product Identification

MLH 2012 F 22N M T

(1) (2) (4) (5) (6) (7)

Series name	
MLH	Power Inductor For High Freq.

Dimensions L x W size mm [inch]	
1608 [0603]	1.6 x 0.80
2012 [0805]	2.0 x 1.25

Characteristic type	
F	Very High Frequency
W	High Frequency High Current
H	Very High Frequency High Current

Inductance	
F22N	22 nH
F47N	47 nH

Inductance Tolerance	
M	+/- 20%
K	+/- 10%

Packaging style	
T	Taping reel

For High frequency

MLH2012

Multilayer Power Inductor

K tolerance

ELECTRICAL CHARACTERISTICS

Tentative SPEC

Case Size [mm]		Characteristic type	Item	L [nH] +/- 10%	SRF [MHz] typ.	DCR [mOhm] +/-30%	IDC-1 [A]	IDC-2 [A]	Status
L x W	T						Typ.	Rated Current	
2012	0.95 Max	Very High Frequency	MLH2012F22NK	22	1000	44	3.0	1.85	NEW
			MLH2012F33NK	33	850	58	2.7	1.6	NEW
			MLH2012F47NK	47	700	64	2.0	1.55	NEW

D.S : Design stage
S.S : Sampling stage
M.P : Mass Production
NEW : NEW Item (Mass Production)

Idc-1 : Depend on the Inductance Saturation. (-30% Reduction from Nominal value).
Idc-2 : Depend on the self temperature rise. (40deg.C Max.)

For High frequency

MLH2012

Multilayer Power Inductor

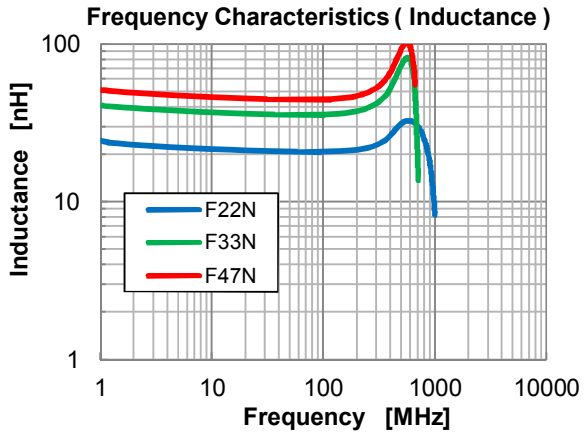
2012 Characteristics data

K tolerance

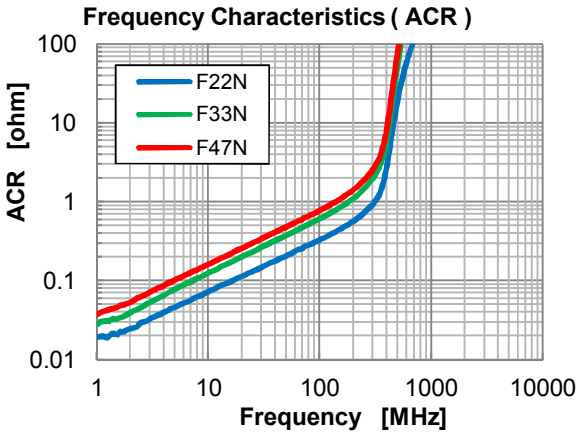
T=0.95 mm Max

MLH2012F
(Very High Freq.)

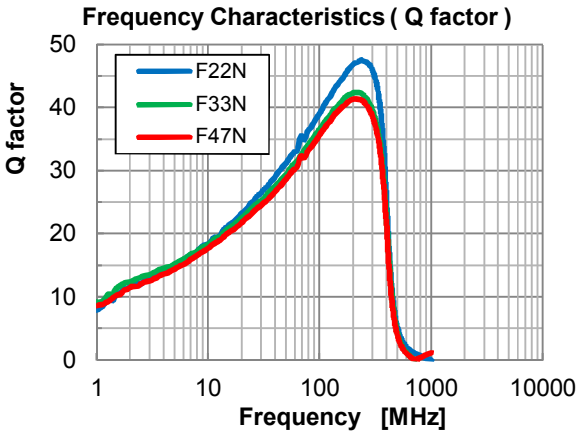
Frequency Characteristics (Inductance)



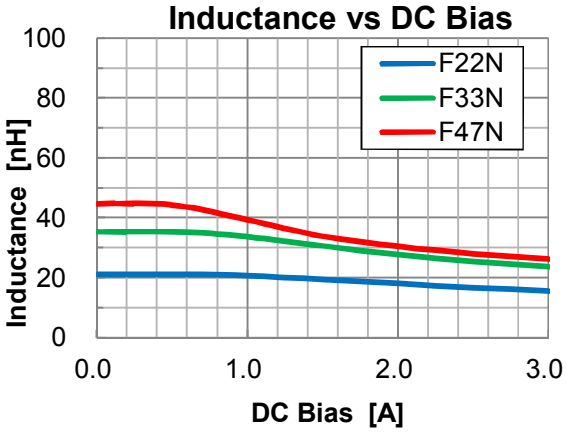
Frequency Characteristics (AC Resistance)



Frequency Characteristics (Q factor)



Inductance vs. DC Bias

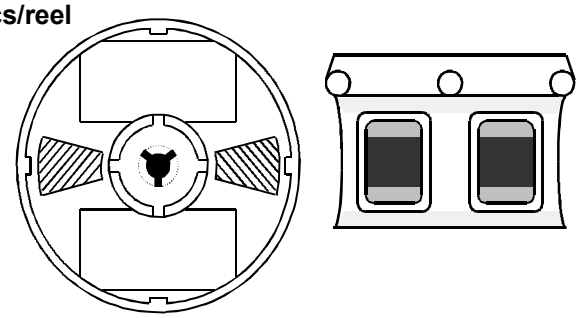


Packaging & Data for mounting

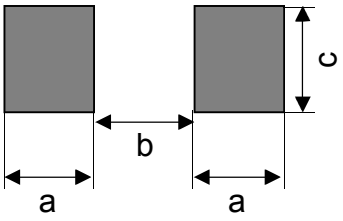
K tolerance

PACKAGING

MLH1005 t=0.55 mm Max : 10,000 pcs/reel
MLH1608 t=0.95 mm Max : 4,000 pcs/reel
MLH2012 t=0.95 mm Max : 4,000 pcs/reel



Recommended Land Pattern



(in mm)

Type	a	b	c
1005	0.5	0.4	0.5
1608	0.6	0.8	0.8
2012	0.8	1.0	1.2

RECOMMENDED SOLDERING CONDITION