Wire-wound Metal Power Inductors MCOIL™ LLBH series (125℃ guaranteed product) for Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)

Code in front of Series have been extracted from Part number, which describes the segment of products, such as kinds and characteristics.

REFLOW

■PART NUMBER

＊ Operating Temp.: −40～+125℃ (Including self-generated heat)

L L	B H	B	1 6 0 8	K K	T	1 R 0	M	G	
①		②	③	④	⑤	⑥	⑦	⑧	⑨

①Series

Code (1)(2)(3)(4)	
LLBH	Wire-wound Metal Power Inductor for Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)

(1) Product Group

Code	
L	Inductors

(2) Category

Code	Recommended equipment	Quality Grade
L	Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)	3

(3) Type

Code	
B	Metal Wire-wound (Horizontal type)

(4) Features, Characteristics

Code	
H	Hybrid power choke

②Features

Code	Feature
B	L-shape electrode (Ag-resin × Sn-plate)

③Dimensions (L × W)

Code	Type (inch)	Dimensions (L × W) [mm]
1608	1608 (0603)	1.6 × 0.8
2520	2520 (1008)	2.5 × 2.0

④Dimensions (T)

Code	Dimensions (T) [mm]
KK	1.0
MK	1.2

⑤Packaging

Code	Packaging
T	Taping

⑥Nominal inductance

Code (example)	Nominal inductance [μH]
R24	0.24
1R0	1.0
4R7	4.7

※R=Decimal point

⑦Inductance tolerance

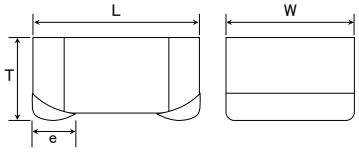
Code	Inductance tolerance
M	±20%
N	±30%

⑧Special code

Code	Special code
G	High characteristic specification

⑨Internal code

■STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY

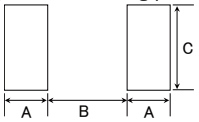


Recommended Land Patterns

Surface Mounting

・Mounting and soldering conditions should be checked beforehand.

・Applicable soldering process to these products is reflow soldering only.



Type	A	B	C
1608	0.55	0.70	1.00
2520	0.60	1.50	2.00

Unit: mm

Type	L	W	T	e	Standard quantity [pcs]	
					Paper tape	Embossed tape
1608KK	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	1.0 max (0.040 max)	0.45±0.15 (0.016±0.006)	—	3000
2520MK	2.5±0.2 (0.098±0.008)	2.0±0.2 (0.079±0.008)	1.2 max (0.047 max)	0.5±0.2 (0.020±0.008)	—	3000

Unit: mm (inch)

■PART NUMBER

●1608KK type 【Thickness : 1.0mm max.】

New part number	Old part number (for reference)	EHS	Nominal inductance [μH]	Inductance tolerance	Self-resonant frequency [MHz] (min.)	DC Resistance [Ω] (max.)	Rated current ※) [mA] (max.)		Measuring frequency [MHz]
							Saturation current Idc1	Temperature rise current Idc2	
LLBHB1608KKTR24NG	MBKK1608HR24N	RoHS	0.24	±30%	–	0.049	1,650	2,300	1.0
LLBHB1608KKTR47NG	MBKK1608HR47N	RoHS	0.47	±30%	–	0.104	1,100	1,400	1.0
LLBHB1608KKTR68NG	MBKK1608HR68N	RoHS	0.68	±30%	–	0.120	950	1,200	1.0
LLBHB1608KKT1R0MG	MBKK1608H1R0M	RoHS	1.0	±20%	–	0.150	800	1,150	1.0
LLBHB1608KKT1R5MG	MBKK1608H1R5M	RoHS	1.5	±20%	–	0.200	650	1,000	1.0
LLBHB1608KKT2R2MG	MBKK1608H2R2M	RoHS	2.2	±20%	–	0.345	520	750	1.0
LLBHB1608KKT3R3MG	MBKK1608H3R3M	RoHS	3.3	±20%	–	0.512	450	600	1.0
LLBHB1608KKT4R7MG	MBKK1608H4R7M	RoHS	4.7	±20%	–	0.730	370	500	1.0

●2520MK type 【Thickness : 1.2mm max.】

New part number	Old part number (for reference)	EHS	Nominal inductance [μH]	Inductance tolerance	Self-resonant frequency [MHz] (min.)	DC Resistance [Ω] (max.)	Rated current ※) [mA] (max.)		Measuring frequency [MHz]
							Saturation current Idc1	Temperature rise current Idc2	
LLBHB2520MKTR24NG	MBMK2520HR24N	RoHS	0.24	±30%	–	0.026	4,750	3,500	1.0
LLBHB2520MKTR47NG	MBMK2520HR47N	RoHS	0.47	±30%	–	0.042	3,900	2,600	1.0
LLBHB2520MKTR68NG	MBMK2520HR68N	RoHS	0.68	±30%	–	0.058	3,150	2,150	1.0
LLBHB2520MKT1R0MG	MBMK2520H1R0M	RoHS	1.0	±20%	–	0.072	2,350	1,850	1.0
LLBHB2520MKT1R5MG	MBMK2520H1R5M	RoHS	1.5	±20%	–	0.106	2,050	1,500	1.0
LLBHB2520MKT2R2MG	MBMK2520H2R2M	RoHS	2.2	±20%	–	0.159	1,800	1,250	1.0
LLBHB2520MKT3R3MG	MBMK2520H3R3M	RoHS	3.3	±20%	–	0.260	1,400	970	1.0
LLBHB2520MKT4R7MG	MBMK2520H4R7M	RoHS	4.7	±20%	–	0.380	1,150	800	1.0

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20℃)
※) The temperature rise current value (Idc2) is the DC current value having temperature increase by 40℃. (at 20℃)
※) The rated current value is following either Idc1 or Idc2, which is the lower one.