Wire-wound Metal Power Inductors MCOIL™ LSEU series for General Electronic Equipment for Consumer

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	S	E	U	C	2	0	1	6	K	K	T	1	R	0	M	
①				②	③				④		⑤	⑥			⑦	⑧

①Series

Code (1)(2)(3)(4)	
LSEU	Wire-wound Metal Power Inductor for General Electronic Equipment for Consumer

(1) Product Group

Code	
L	Inductors

(2) Category

Code	Recommended equipment	Quality Grade
S	General Electronic Equipment for Consumer	3

(3) Type

Code	
E	Metal Wire-wound (High filling type)

(4) Features, Characteristics

Code	
U	High strength power choke

②Features

Code	Feature
C	Bottom electrode (Ag-resin × Sn-plate)

③Dimensions (L × W)

Code	Dimensions (L × W) [mm]
2012	2.0 × 1.25
2016	2.0 × 1.6
2520	2.5 × 2.0
3225	3.2 × 2.5

④Dimensions (T)

Code	Dimensions (T) [mm]
HK	0.8
KK	1.0

⑤Packaging

Code	Packaging
T	Taping

⑥Nominal inductance

Code (example)	Nominal inductance [μH]
R47	0.47
1R0	1.0
4R7	4.7

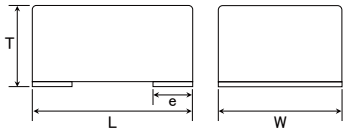
※R=Decimal point

⑦Inductance tolerance

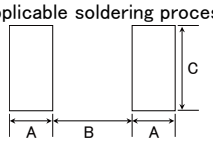
Code	Inductance tolerance
M	±20%

⑧Internal 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
2012	0.8	0.6	1.4
2016	0.8	0.6	1.8
2520	1.0	0.8	2.2
3225	1.1	1.3	2.7

Unit : mm

Type	L	W	T	e	Standard quantity[pcs] Taping
2012HK	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.8 max (0.031 max)	0.6±0.3 (0.024±0.012)	3000
2012KK	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	1.0 max (0.039 max)	0.6±0.3 (0.024±0.012)	3000
2016HK	2.0±0.2 (0.079±0.008)	1.6±0.2 (0.063±0.008)	0.8 max (0.031 max)	0.6±0.3 (0.024±0.012)	3000
2016KK	2.0±0.2 (0.079±0.008)	1.6±0.2 (0.063±0.008)	1.0 max (0.039 max)	0.6±0.3 (0.024±0.012)	3000
2520KK	2.5±0.2 (0.098±0.008)	2.0±0.2 (0.079±0.008)	1.0 max (0.039 max)	0.8±0.3 (0.031±0.012)	3000
3225HK	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	0.8 max (0.031 max)	1.0±0.3 (0.039±0.012)	3000

Unit : mm (inch)

■PART NUMBER

●2012HK type 【Thickness : 0.8mm 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	
LSEUC2012HKTR47M	MEHK2012UR47M	RoHS	0.47	±20%	–	0.033	4,500	3,800	1

●2012KK 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	
LSEUC2012KKTR33M	MEKK2012UR33M	RoHS	0.33	±20%	–	0.024	5,800	4,600	1
LSEUC2012KKTR47M	MEKK2012UR47M	RoHS	0.47	±20%	–	0.027	5,000	4,300	1

●2016HK type 【Thickness : 0.8mm 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	
LSEUC2016HKTR47M	MEHK2016UR47M	RoHS	0.47	±20%	–	0.028	4,900	4,200	1
LSEUC2016HKT1R0M	MEHK2016U1R0M	RoHS	1.0	±20%	–	0.050	3,200	3,000	1

●2016KK 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	
LSEUC2016KKTR47M	MEKK2016UR47M	RoHS	0.47	±20%	–	0.026	6,300	4,700	1
LSEUC2016KKT1R0M	MEKK2016U1R0M	RoHS	1.0	±20%	–	0.048	4,100	3,500	1

●2520KK 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	
LSEUC2520KKT1R0M	MEKK2520U1R0M	RoHS	1.0	±20%	–	0.037	4,400	3,600	1
LSEUC2520KKT2R2M	MEKK2520U2R2M	RoHS	2.2	±20%	–	0.076	3,000	2,500	1
LSEUC2520KKT4R7M	MEKK2520U4R7M	RoHS	4.7	±20%	–	0.160	2,200	1,800	1
LSEUC2520KKT6R8M	MEKK2520U6R8M	RoHS	6.8	±20%	–	0.265	1,200	1,300	1
LSEUC2520KKT100M	MEKK2520U100M	RoHS	10	±20%	–	0.432	1,000	1,000	1

●3225HK type 【Thickness : 0.8mm 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	
LSEUC3225HKT1R0M	MEHK3225U1R0M	RoHS	1.0	±20%	–	0.043	5,200	4,200	1

※) 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 up to 40℃. (at 20℃)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

※) Idc2 Measurement board data

Material:FR4
Board dimensions : 100 × 50 × 1.6t mm
Pattern dimensions : 45 × 45 mm (Double side board)
Pattern thickness : 70 μm