

Wire-wound Metal Power Inductors MCOIL™ LSEP 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°C (Including self-generated heat)

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

① Series

Code	
(1)(2)(3)(4)	
LSEP	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	
P	High current power choke

② Features

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

③ Dimensions (L × W)

Code	Dimensions (L × W) [mm]
2012	2.0 × 1.2
2016	2.0 × 1.6
2520	2.5 × 2.0

④ Dimensions (T)

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

⑤ Packaging

Code	Packaging
T	Taping

⑥ Nominal inductance

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

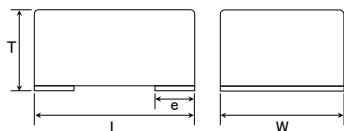
※R=Decimal point

⑦ Inductance tolerance

Code	Inductance tolerance
M	±20%

⑧ Internal code

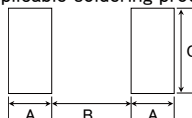
STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY



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	0.7	0.8	1.4
2016	0.7	0.8	1.8
2520	0.9	1.0	2.2

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)	0.5±0.3 (0.020±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)	0.5±0.3 (0.020±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)	0.5±0.3 (0.020±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)	0.65±0.3 (0.026±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 [μ H]	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	
LSEPC2012HKTR47M	MEHK2012HR47M	RoHS	0.47	$\pm 20\%$	—	0.035	4,100	3,700	1

2012KK type 【Thickness: 1.0mm max.】

New part number	Old part number (for reference)	EHS	Nominal inductance [μ H]	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	
LSEPC2012KKTR47M	MEKK2012HR47M	RoHS	0.47	$\pm 20\%$	—	0.030	4,500	4,200	1

2016KK type 【Thickness: 1.0mm max.】

New part number	Old part number (for reference)	EHS	Nominal inductance [μ H]	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	
LSEPC2016KKTR47M	MEKK2016HR47M	RoHS	0.47	$\pm 20\%$	—	0.026	5,300	4,700	1
LSEPC2016KKT1R0M	MEKK2016H1R0M	RoHS	1.0	$\pm 20\%$	—	0.048	4,000	3,500	1
LSEPC2016KKT2R2M	MEKK2016H2R2M	RoHS	2.2	$\pm 20\%$	—	0.100	2,300	2,300	1

2520KK type 【Thickness: 1.0mm max.】

New part number	Old part number (for reference)	EHS	Nominal inductance [μ H]	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	
LSEPC2520KKT1R0M	MEKK2520H1R0M	RoHS	1	$\pm 20\%$	—	0.039	4,400	3,800	1

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) 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 μ m