

Wire-wound Metal Power Inductors MCOIL™ LSAP series

for General Electronic Equipment for Consumer

シリーズ前の記号は、品番から抽出したものであり、製品の種類や特性などの区分を示すためのものです。

REFLOW

PART NUMBER

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

* Operating Temp.: -40~+105°C (Including self-generated heat) ※1 Parts Number reference

L	S	A	P	B	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)	
LSAP	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	
A	Metal Wire-wound

(4) Features, Characteristics

Code	
P	High current power choke

② Features

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

③ Dimensions (L × W)

Code	Type (inch)	Dimensions (L × W) [mm]
2016	2016 (0806)	2.0 × 1.6
2520	2520 (1008)	2.5 × 2.0

④ Dimensions (T)

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

⑤ Packaging

Code	Packaging
T	Taping

⑥ Nominal inductance

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

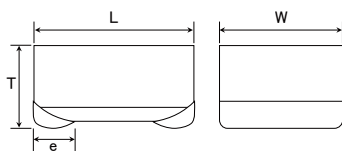
※R=Decimal point

⑦ Inductance tolerance

Code	Inductance tolerance
M	±20%

⑧ Internal code

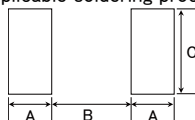
STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY



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
2016	0.7	0.8	1.8
2520	0.8	1.2	2.0

Unit: mm

Type	L	W	T	e	Standard quantity [pcs] Taping
2016KK	2.0±0.1 (0.079±0.004)	1.6±0.1 (0.063±0.004)	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)	0.5±0.3 (0.020±0.012)	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±0.3 (0.020±0.012)	3000

Unit: mm (inch)

PART NUMBER

● 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	
LSAPB2016KKTR22M	MAKK2016HR22M	RoHS	0.22	±20%	—	0.026	5,800	4,000	2
LSAPB2016KKTR24M	MAKK2016HR24M	RoHS	0.24	±20%	—	0.026	5,800	4,000	2
LSAPB2016KKTR33M	MAKK2016HR33M	RoHS	0.33	±20%	—	0.030	4,700	3,500	2
LSAPB2016KKTR47M	MAKK2016HR47M	RoHS	0.47	±20%	—	0.036	4,300	3,300	2
LSAPB2016KKTR68M	MAKK2016HR68M	RoHS	0.68	±20%	—	0.050	3,200	2,700	2
LSAPB2016KKT1R0M	MAKK2016H1R0M	RoHS	1.0	±20%	—	0.070	2,700	2,300	2
LSAPB2016KKT1R5M	MAKK2016H1R5M	RoHS	1.5	±20%	—	0.105	2,100	1,800	2

● 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	
LSAPB2520KKTR22M	MAKK2520HR22M	RoHS	0.22	±20%	—	0.021	7500	4900	2
LSAPB2520KKTR33M	MAKK2520HR33M	RoHS	0.33	±20%	—	0.026	6200	4300	2
LSAPB2520KKTR47M	MAKK2520HR47M	RoHS	0.47	±20%	—	0.029	5700	4000	2
LSAPB2520KKTR68M	MAKK2520HR68M	RoHS	0.68	±20%	—	0.043	4300	3400	2
LSAPB2520KKT1R0M	MAKK2520H1R0M	RoHS	1.0	±20%	—	0.053	3800	3000	2
LSAPB2520KKT1R5M	MAKK2520H1R5M	RoHS	1.5	±20%	—	0.078	3000	2400	2
LSAPB2520KKT2R2M	MAKK2520H2R2M	RoHS	2.2	±20%	—	0.120	2500	1800	2
LSAPB2520KKT100M	MAKK2520H100M ※1	RoHS	10	±20%	—	0.650	1100	750	2

● 2520MK type 【Thickness: 1.2mm 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	
LSAPB2520MKTR22M	MAMK2520HR22M	RoHS	0.22	±20%	—	0.021	7500	5000	2
LSAPB2520MKTR33M	MAMK2520HR33M	RoHS	0.33	±20%	—	0.023	6600	4400	2
LSAPB2520MKTR47M	MAMK2520HR47M	RoHS	0.47	±20%	—	0.026	5800	4100	2
LSAPB2520MKTR68M	MAMK2520HR68M	RoHS	0.68	±20%	—	0.036	5100	3500	2
LSAPB2520MKT1R0M	MAMK2520H1R0M	RoHS	1.0	±20%	—	0.045	4300	3100	2
LSAPB2520MKT1R5M	MAMK2520H1R5M	RoHS	1.5	±20%	—	0.065	3300	2600	2
LSAPB2520MKT2R2M	MAMK2520H2R2M	RoHS	2.2	±20%	—	0.090	2800	2200	2

※) 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 by 40°C. (at 20°C)

※) The rated current value is following either Idc1 or Idc2, which is the lower one.