

Wire-wound Metal Power Inductors MCOIL™ LSAN 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~+105°C (Including self-generated heat)

L	S	A	N	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)	
LSAN	Wire-wound Metal Power Inductor for General Electronic Equipment for Consumer

(1) Product Group

Code	
L	Inductors

(3) Type

Code	
A	Metal Wire-wound

(2) Category

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

(4) Features, Characteristics

Code	
N	Standard Power choke

② Features

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

⑤ Packaging

Code	Packaging
T	Taping

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

⑥ Nominal inductance

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

※R=Decimal point

④ Dimensions (T)

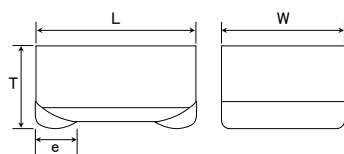
Code	Dimensions (T) [mm]
KK	1.0
MK	1.2

⑦ Inductance tolerance

Code	Inductance tolerance
M	±20%

⑧ Internal code

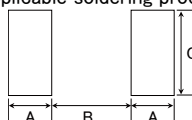
STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY



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	
LSANB2016KKTR24M	MAKK2016TR24M	RoHS	0.24	±20%	—	0.037	4,200	3,000	2
LSANB2016KKTR33M	MAKK2016TR33M	RoHS	0.33	±20%	—	0.040	3,600	3,200	2
LSANB2016KKTR47M	MAKK2016TR47M	RoHS	0.47	±20%	—	0.460	3,200	2,800	2
LSANB2016KKTR68M	MAKK2016TR68M	RoHS	0.68	±20%	—	0.065	2,500	2,500	2
LSANB2016KKT1R0M	MAKK2016T1R0M	RoHS	1.0	±20%	—	0.075	2,200	2,200	2
LSANB2016KKT1R5M	MAKK2016T1R5M	RoHS	1.5	±20%	—	0.130	1,600	1,650	2
LSANB2016KKT2R2M	MAKK2016T2R2M	RoHS	2.2	±20%	—	0.160	1,500	1,500	2
LSANB2016KKT3R3M	MAKK2016T3R3M	RoHS	3.3	±20%	—	0.255	1,150	1,200	2
LSANB2016KKT4R7M	MAKK2016T4R7M	RoHS	4.7	±20%	—	0.380	1,000	950	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	
LSANB2520KKTR33M	MAKK2520TR33M	RoHS	0.33	±20%	—	0.038	4,700	3,500	2
LSANB2520KKTR47M	MAKK2520TR47M	RoHS	0.47	±20%	—	0.046	3,900	3,200	2
LSANB2520KKTR68M	MAKK2520TR68M	RoHS	0.68	±20%	—	0.059	3,700	2,900	2
LSANB2520KKT1R0M	MAKK2520T1R0M	RoHS	1.0	±20%	—	0.072	2,700	2,500	2
LSANB2520KKT1R5M	MAKK2520T1R5M	RoHS	1.5	±20%	—	0.125	2,300	1,800	2
LSANB2520KKT2R2M	MAKK2520T2R2M	RoHS	2.2	±20%	—	0.156	1,900	1,500	2
LSANB2520KKT3R3M	MAKK2520T3R3M	RoHS	3.3	±20%	—	0.200	1,550	1,300	2
LSANB2520KKT4R7M	MAKK2520T4R7M	RoHS	4.7	±20%	—	0.300	1,300	1,100	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	
LSANB2520MKTR47M	MAMK2520TR47M	RoHS	0.47	±20%	—	0.039	4,200	3,400	2
LSANB2520MKTR68M	MAMK2520TR68M	RoHS	0.68	±20%	—	0.048	3,200	3,200	2
LSANB2520MKT1R0M	MAMK2520T1R0M	RoHS	1.0	±20%	—	0.059	3,100	2,700	2
LSANB2520MKT2R2M	MAMK2520T2R2M	RoHS	2.2	±20%	—	0.110	2,000	1,900	2
LSANB2520MKT3R3M	MAMK2520T3R3M	RoHS	3.3	±20%	—	0.156	1,800	1,700	2
LSANB2520MKT4R7M	MAMK2520T4R7M	RoHS	4.7	±20%	—	0.260	1,500	1,300	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.