

FSL series ( Rev. 4.0 )



FSL series is designed for low profile type with low Rdc and large current. And its magnetic shielded type is suitable for high-density mounting and flat bottom surface allows for reliable mounting onto the board. Soldering conditions can be easily confirmed as mounting onto the board. This series also provides customers with embossed carrier type packaging for automatic mounting machine.

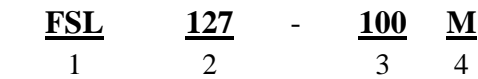
Features

- \* RoHS compliant
- \* Low resistance and high rated currents

Applications

- \* Portable telephones
- \* Computers
- \* Hard disk drives and other electronic devices

Product Identification



- 1. Product Code
- 2. Size Code: 12.8 \* 12.8 \* 6.8mm
- 3. Inductance: 10uH
- 4. Tolerance: M= ±20%

Operating & Storage Condition :

- \* Operating Temp. : -40 to +85 °C
- \* Storage Temp. : -40 to +85 °C
- \* Storage Life Time : 12 Months @25 °C , RH 65%

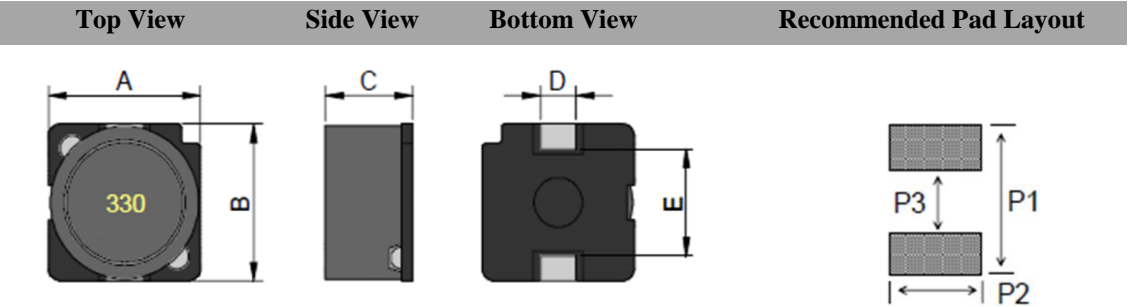
Test Equipment :

- \* HP4284A,HP42841A- L,IDC,Q.RDC
- \* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions :

- \* Ambient Temp : 25 ± 5 °C
- \* Relative Humidity : 75 ± 10%

Dimension & Recommended PAD Layout: [ mm ]



Size Code	A(max.)	B(max.)	C(max.)	D(±0.2)	E(ref.)	P1	P2	P3
FSL63	6.2	6.2	3.0	1.8	3.0	6.6	2.4	2.6
FSL73	7.4	7.4	3.5	2.0	5.4	7.8	2.6	5.0
FSL74	7.4	7.4	4.5	2.0	5.4	7.8	2.6	5.0
FSL104	10.4	10.4	4.8	3.0	6.5	10.8	3.6	6.1
FSL126	12.8	12.8	5.8	3.0	8.6	13.2	3.6	8.2
FSL127	12.8	12.8	6.8	3.0	8.6	13.2	3.6	8.2
FSL128	12.8	12.8	7.8	3.0	8.6	13.2	3.6	8.2

**FSL series** (Rev. 4.0)**Electrical Characteristics**

P/N	Inductance (uH)	Tolerance (±%)	Test Freq. (KHz) @0.25V	DCR (Ω) max.	IDC (A) max.
FSL63-2R2M	2.2	20	100	0.027	2.50
FSL63-4R7M	4.7	20	100	0.050	1.90
FSL63-100M	10.0	20	1	0.150	1.10
FSL63-120M	12.0	20	1	0.200	1.00
FSL63-150M	15.0	20	1	0.230	0.90
FSL63-180M	18.0	20	1	0.270	0.80
FSL63-220M	22.0	20	1	0.340	0.74
FSL63-270M	27.0	20	1	0.380	0.66
FSL63-330M	33.0	20	1	0.450	0.59
FSL63-390M	39.0	20	1	0.490	0.54
FSL63-470M	47.0	20	1	0.690	0.50
FSL63-560M	56.0	20	1	0.780	0.46
FSL63-680M	68.0	20	1	1.070	0.42
FSL63-820M	82.0	20	1	1.210	0.38
FSL63-101M	100.0	20	1	1.390	0.34
FSL63-121M	120.0	20	1	1.900	0.31
FSL63-151M	150.0	20	1	2.180	0.28
FSL63-181M	180.0	20	1	2.770	0.26
FSL63-221M	220.0	20	1	3.120	0.23
FSL63-271M	270.0	20	1	4.380	0.22
FSL63-331M	330.0	20	1	4.940	0.19

\* Irms DC current (A) that will cause an approximate  $\Delta T$  of 40°C

\* Isat DC current (A) that will cause L to drop approximately 25%

\* Tolerance: M=±20%

## FSL series (Rev. 4.0)

## Electrical Characteristics

P/N	Inductance ( $\mu$ H)	Tolerance ( $\pm\%$ )	Test Freq. (KHz) @0.25V	DCR ( $\Omega$ ) max.	IDC (A) max.
FSL73-1R0M	1.0	20	100	0.019	3.12
FSL73-1R5M	1.5	20	100	0.023	2.85
FSL73-2R2M	2.2	20	100	0.028	2.66
FSL73-3R3M	3.3	20	100	0.035	2.26
FSL73-4R7M	4.7	20	100	0.430	1.96
FSL73-6R8M	6.8	20	100	0.055	1.76
FSL73-100M	10.0	20	1	0.080	1.34
FSL73-120M	12.0	20	1	0.090	1.23
FSL73-150M	15.0	20	1	0.120	1.09
FSL73-180M	18.0	20	1	0.130	0.99
FSL73-220M	22.0	20	1	0.150	0.90
FSL73-270M	27.0	20	1	0.210	0.81
FSL73-330M	33.0	20	1	0.250	0.72
FSL73-390M	39.0	20	1	0.310	0.67
FSL73-470M	47.0	20	1	0.350	0.60
FSL73-560M	56.0	20	1	0.430	0.55
FSL73-680M	68.0	20	1	0.520	0.50
FSL73-820M	82.0	20	1	0.600	0.46
FSL73-101M	100.0	20	1	0.790	0.41
FSL74-1R0M	1.0	20	100	0.023	2.88
FSL74-1R5M	1.5	20	100	0.027	2.61
FSL74-2R2M	2.2	20	100	0.030	2.46
FSL74-3R3M	3.3	20	100	0.035	2.2.8
FSL74-4R7M	4.7	20	100	0.041	2.08
FSL74-6R8M	6.8	20	100	0.047	1.94
FSL74-100M	10.0	20	1	0.050	1.68
FSL74-120M	12.0	20	1	0.070	1.54
FSL74-150M	15.0	20	1	0.080	1.39
FSL74-180M	18.0	20	1	0.090	1.26
FSL74-220M	22.0	20	1	0.110	1.1.3
FSL74-270M	27.0	20	1	0.150	1.02
FSL74-330M	33.0	20	1	0.170	0.84
FSL74-390M	39.0	20	1	0.180	0.80
FSL74-470M	47.0	20	1	0.200	0.76
FSL74-560M	56.0	20	1	0.280	0.64
FSL74-680M	68.0	20	1	0.320	0.60
FSL74-820M	82.0	20	1	0.350	0.57
FSL74-101M	100.0	20	1	0.400	0.50
FSL74-221M	220.0	20	1	0.620	0.33
FSL74-331M	330.0	20	1	0.940	0.27

\* Irms DC current (A) that will cause an approximate  $\Delta T$  of 40°C

\* Isat DC current (A) that will cause L to drop approximately 25%

\* Tolerance: M= $\pm 20\%$

## FSL series (Rev. 4.0)

## Electrical Characteristics

P/N	Inductance ( $\mu$ H)	Tolerance ( $\pm\%$ )	Test Freq. (KHz) @0.25V	DCR ( $\Omega$ ) $\pm 20\%$	IDC (A) max.
FSL104-4R7M	4.7	20	100	0.034	3.60
FSL104-6R8M	6.8	20	100	0.035	3.50
FSL104-100M	10.0	20	1	0.036	3.00
FSL104-150M	15.0	20	1	0.047	2.40
FSL104-220M	22.0	20	1	0.059	2.10
FSL104-330M	33.0	20	1	0.082	1.60
FSL104-470M	47.0	20	1	0.100	1.40
FSL104-680M	68.0	20	1	0.140	1.20
FSL104-101M	100.0	20	1	0.200	1.00
FSL104-151M	150.0	20	1	0.350	0.79
FSL104-221M	220.0	20	1	0.470	0.65
FSL104-331M	330.0	20	1	0.680	0.54
FSL104-471M	470.0	20	1	1.030	0.47
FSL104-681M	680.0	20	1	1.600	0.38
FSL104-102M	1000.0	20	1	2.800	0.32
FSL104-152M	1500.0	20	1	3.400	0.22
FSL126-6R0N	6.0	30	100	0.016	3.60
FSL126-100M	10.0	20	1	0.022	3.40
FSL126-150M	15.0	20	1	0.026	2.80
FSL126-220M	22.0	20	1	0.034	2.30
FSL126-330M	33.0	20	1	0.042	1.90
FSL126-470M	47.0	20	1	0.062	1.60
FSL126-680M	68.0	20	1	0.083	1.30
FSL126-101M	100.0	20	1	0.117	1.10
FSL126-151M	150.0	20	1	0.190	0.88
FSL126-221M	220.0	20	1	0.270	0.72
FSL126-331M	330.0	20	1	0.410	0.59
FSL126-471M	470.0	20	1	0.520	0.49
FSL126-681M	680.0	20	1	0.760	0.43
FSL126-102M	1000.0	20	1	1.120	0.34
FSL126-152M	1500.0	20	1	1.800	0.29

\* Irms DC current (A) that will cause an approximate  $\Delta T$  of 40°C

\* Isat DC current (A) that will cause L to drop approximately 25%

\* Tolerance: M= $\pm 20\%$ , N=30%

**FSL series** (Rev. 4.0)**Electrical Characteristics**

P/N	Inductance (uH)	Tolerance (±%)	Test Freq. (KHz) @0.25V	DCR (Ω) ±20%	IDC (A) max.
FSL127-2R0N	2.0	30	100	0.012	10.0
FSL127-4R2N	4.2	30	100	0.015	7.3
FSL127-7R0N	7.0	30	100	0.018	5.7
FSL127-100M	10.0	20	1	0.020	5.0
FSL127-150M	15.0	20	1	0.024	4.2
FSL127-220M	22.0	20	1	0.032	3.5
FSL127-330M	33.0	20	1	0.041	2.8
FSL127-470M	47.0	20	1	0.058	2.4
FSL127-680M	68.0	20	1	0.079	2.0
FSL127-101M	100.0	20	1	0.123	1.6
FSL127-221M	220.0	20	1	0.273	1.0
FSL128-1R2N	1.2	30	100	6.80	13.0
FSL128-2R7N	2.7	30	100	9.40	10.0
FSL128-3R3N	3.3	30	100	10.00	9.5
FSL128-3R9N	3.9	30	100	10.40	9.0
FSL128-4R7N	4.7	30	100	11.25	8.5
FSL128-5R6N	5.6	30	100	11.60	7.8
FSL128-6R8N	6.8	30	100	13.10	7.2
FSL128-100M	10.0	20	1	15.90	5.5
FSL128-150M	15.0	20	1	18.40	4.7
FSL128-220M	22.0	20	1	26.30	4.0
FSL128-330M	33.0	20	1	40.20	3.2
FSL128-470M	47.0	20	1	52.80	2.7
FSL128-680M	68.0	20	1	77.80	2.0
FSL128-101M	100.0	20	1	125.00	1.9
FSL128-151M	150.0	20	1	175.00	1.5
FSL128-221M	220.0	20	1	258.00	1.3

\* Irms DC current (A) that will cause an approximate ΔT of 40°C

\* Isat DC current (A) that will cause L to drop approximately 25%

\* Tolerance: M=±20%, N=30%