

### Characteristics

- Magnetic iron alloy allows high rated currents
- Compact design
- Magnetically shielded
- High current capability and handles high transient current spikes
- Low acoustic noise and low leakage flux noise
- Operating temperature: -40 °C to 125 °C

**4-times higher saturation current  
Best efficiency  
Minimized package**

### Applications

- DC/DC-converter for high current power supplies
- DC/DC-converter for Field Programmable Gate Array (FPGA)
- POL-converters
- Portable power like PDA, digital camera
- Mainboards/graphic cards
- Battery powered devices
- Wireless communication devices
- Power supplies for smart-phones, tablet PCs and other mobile devices

QR-Code

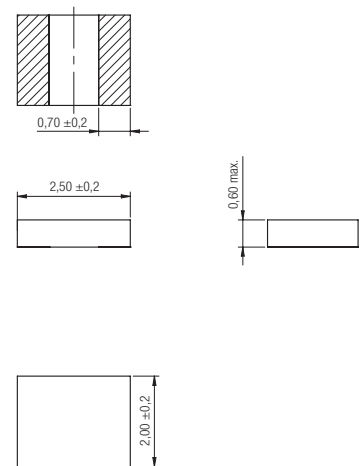


### Electrical properties: Size 2506

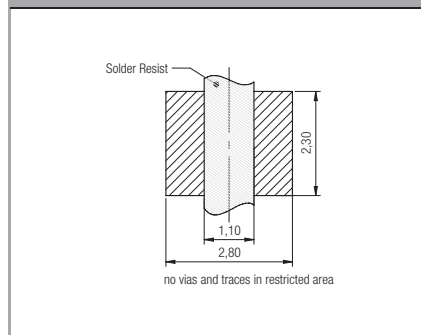
Order Code	L (µH)	Tolerance (%)	I <sub>R</sub> (A)	I <sub>sat</sub> (A)	R <sub>DC typ.</sub> (mΩ)	R <sub>DC max.</sub> (mΩ)	Qty.
744 383 210 047	0.47	±30	2.2	3.7	76.0	95.0	3000
744 383 210 10	1.0		1.25	2.5	163.0	196.0	

I<sub>R</sub> referring to 40 K heating above ambient temperature  
I<sub>sat</sub> referring to inductance loss of 20% typical

### Dimensions (in mm)



### Soldering Pad (in mm)

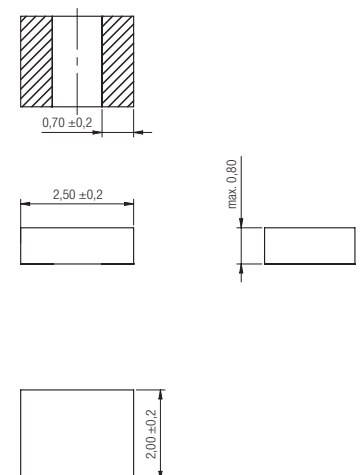


### Electrical properties: Size 2508

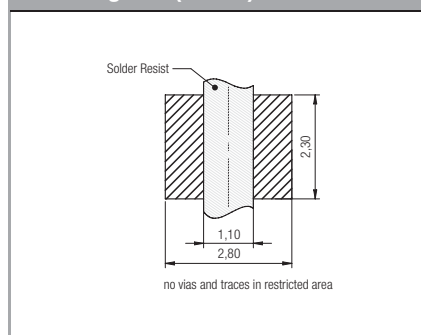
Order Code	L (µH)	Tolerance (%)	I <sub>R</sub> (A)	I <sub>sat</sub> (A)	R <sub>DC typ.</sub> (mΩ)	R <sub>DC max.</sub> (mΩ)	Qty.
744 383 220 047	0.47	±30	2.25	4.4	70.0	87.0	3000
744 383 220 10	1.0		1.75	3.35	107.0	133.0	
744 383 220 22	2.2		1.34	2.2	252.0	302.0	

I<sub>R</sub> referring to 40 K heating above ambient temperature  
I<sub>sat</sub> referring to inductance loss of 20% typical

### Dimensions (in mm)



### Soldering Pad (in mm)



## SMD Metal Alloy Power Inductor

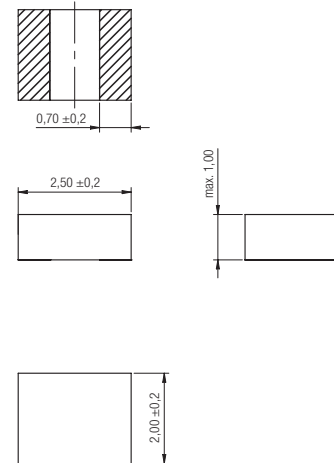
Size 2510 / Size 3010

### Electrical properties: Size 2510

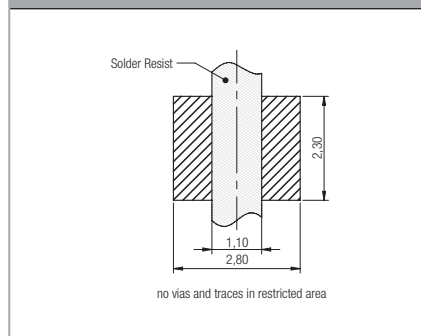
Order Code	L (µH)	Tolerance (%)	I <sub>R</sub> (A)	I <sub>sat</sub> (A)	R <sub>DC typ.</sub> (mΩ)	R <sub>DC max.</sub> (mΩ)	Qty.
744 383 230 033	0.33	±30	3.4	6.2	29.0	38.0	3000
744 383 230 047	0.47	±30	3.2	5.5	37.0	48.0	
744 383 230 068	0.68	±30	3.1	4.7	46.0	60.0	
744 383 230 082	0.82	±30	2.6	4.25	53.0	69.0	
744 383 230 10	1.0	±20	2.5	4.0	63.0	75.0	
744 383 230 12	1.2	±20	1.9	3.8	82.0	106	
744 383 230 15	1.5	±20	1.8	3.5	92.0	110	
744 383 230 22	2.2	±20	1.3	2.5	147	176	
744 383 230 33	3.3	±20	1.25	2.1	220	264	
744 383 230 47	4.7	±20	0.94	1.75	338	388	
744 383 230 68	6.8	±20	0.85	1.55	563	648	
744 383 230 82	8.2	±20	0.7	1.45	646	743	
744 383 231 00	10.0	±20	0.6	1.35	733	843	

I<sub>R</sub> referring to 40 K heating above ambient temperature  
 I<sub>sat</sub> referring to inductance loss of 20% typical

### Dimensions (in mm)



### Soldering Pad (in mm)

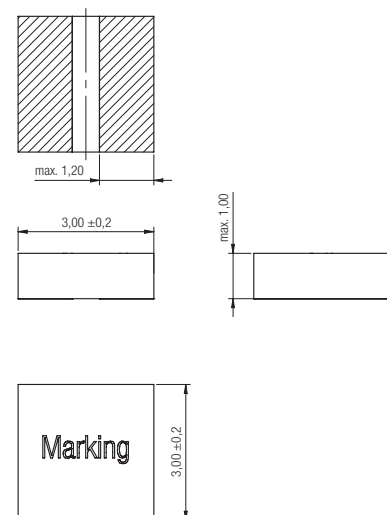


### Electrical properties: Size 3010

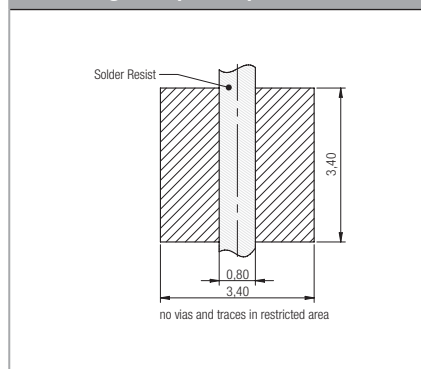
Order Code	L (µH)	Tolerance (%)	I <sub>R</sub> (A)	I <sub>sat</sub> (A)	R <sub>DC typ.</sub> (mΩ)	R <sub>DC max.</sub> (mΩ)	Qty.
744 383 330 22	2.2	±20	1.4	3.9	150	172	1000
744 383 330 33	3.3		1.1	2.95	232	266	
744 383 330 47	4.7		0.9	2.4	305	350	

I<sub>R</sub> referring to 40 K heating above ambient temperature  
 I<sub>sat</sub> referring to inductance loss of 20% typical

### Dimensions (in mm)



### Soldering Pad (in mm)

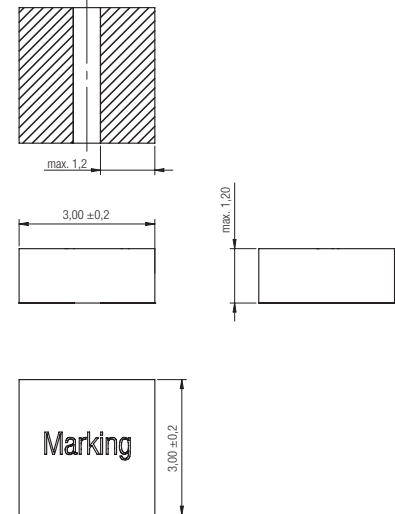


### Electrical properties: Size 3012

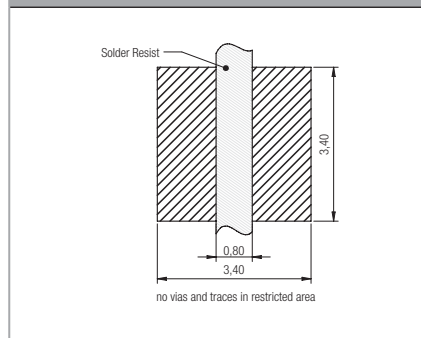
Order Code	L (µH)	Tolerance (%)	I <sub>R</sub> (A)	I <sub>sat</sub> (A)	R <sub>DC typ.</sub> (mΩ)	R <sub>DC max.</sub> (mΩ)	Qty.
744 383 340 033	0.33	±30	4.8	11.1	13.2	15.8	1000
744 383 340 047	0.47	±30	4.0	9.4	16.6	19.9	
744 383 340 056	0.56	±30	3.6	8.5	27.0	32.4	
744 383 340 068	0.68	±20	3.5	7.7	28.7	34.4	
744 383 340 10	1.0	±20	2.75	6.6	41.2	50.5	
744 383 340 12	1.2	±20	2.65	6.0	46.8	56.1	
744 383 340 15	1.5	±20	2.0	5.7	75.3	90.3	
744 383 340 22	2.2	±20	1.80	5.0	100	115.0	
744 383 340 33	3.3	±20	1.4	4.0	136.8	164.2	
744 383 340 47	4.7	±20	1.1	3.8	222.6	256	
744 383 340 56	5.6	±20	1.0	3.0	338.3	389	
744 383 340 68	6.8	±20	0.88	2.7	368.2	423.4	

I<sub>R</sub> referring to 40 K heating above ambient temperature  
 I<sub>sat</sub> referring to inductance loss of 20% typical

### Dimensions (in mm)



### Soldering Pad (in mm)

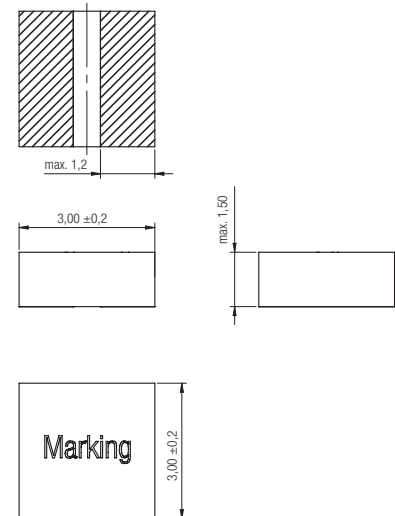


### Electrical properties: Size 3015

Order Code	L (µH)	Tolerance (%)	I <sub>R</sub> (A)	I <sub>sat</sub> (A)	R <sub>DC typ.</sub> (mΩ)	R <sub>DC max.</sub> (mΩ)	Qty.
744 383 350 10	1.0	±20	2.7	4.5	39.0	47.0	1000
744 383 350 22	2.2		1.8	3.5	94.0	108	
744 383 350 33	3.3		1.7	3.2	114	131	
744 383 350 47	4.7		1.5	2.8	141	162	
744 383 350 68	6.8		1.1	2.4	250	287	
744 383 351 00	10.0		0.85	2.0	446	513	
744 383 351 50	15.0		0.65	1.71	720	830	
744 383 352 20	22.0		0.60	1.60	940	1040	
744 383 353 30	33.0		0.50	1.30	1210	1330	
744 383 354 70	47.0		0.39	1.18	2090	2300	

I<sub>R</sub> referring to 40 K heating above ambient temperature  
 I<sub>sat</sub> referring to inductance loss of 20% typical

### Dimensions (in mm)



### Soldering Pad (in mm)

