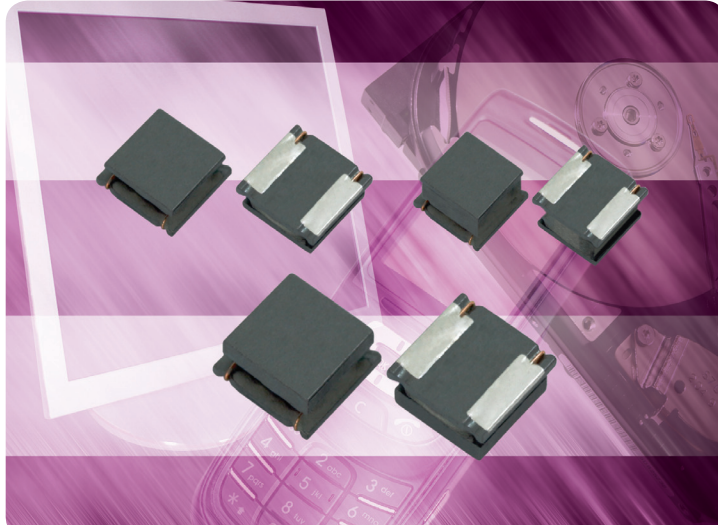


## Low-Profile, High-Current Inductors



### KEY BENEFITS

- Ultra-low profiles down to 1.0 mm
- High maximum frequency to 5.0 MHz
- Inductance up to 47  $\mu$ H
- Shielded construction
- Handles high transient current spikes without saturation

### END PRODUCTS

- Cellular phones
- LCD displays
- Hard disk drives (HDDs)
- Digital camcorders (DVCs ), Digital cameras (DSCs)
- PDA's, etc.

### RESOURCES

- Datasheet: IFSC-0806AZ-01 - [www.vishay.com/doc?34291](http://www.vishay.com/doc?34291)
- Datasheet: IFSC-1008AB-01 - [www.vishay.com/doc?34294](http://www.vishay.com/doc?34294)
- Datasheet: IFSC-1111AZ-01 - [www.vishay.com/doc?34293](http://www.vishay.com/doc?34293)
- Datasheet: IFSC-1111AB-01 - [www.vishay.com/doc?34292](http://www.vishay.com/doc?34292)
- Datasheet: IFSC-1515AH-01 - [www.vishay.com/doc?34295](http://www.vishay.com/doc?34295)
- For technical questions contact [magnetics@vishay.com](mailto:magnetics@vishay.com)



## Low-Profile, High-Current Inductors

Inductors - Ultra-Low Profiles Down to 1.0 mm

STANDARD ELECTRICAL SPECIFICATIONS						Dimensions in inches (millimeters)
	L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (MΩ) <sup>(1)</sup>	DCR MAX. 25 °C (MΩ)	HEAT RATING CURRENT DC TYP. (A) (3)	SATURATION CURRENT DC TYP. (A) (4)	
	1.0	96	115	1.60	1.88	
	1.5	143	172	1.40	1.63	
	2.2	196	236	1.30	1.40	
	3.3	247	297	1.05	1.00	
	4.7	331	398	0.90	0.85	
	6.8	623	748	0.60	0.80	
	10.0	1108	1330	0.45	0.62	
22.0	2367	2840	0.30	0.43		
	0.47	25	29	3.70	3.90	
	1.0	37	43	2.60	2.70	
	1.5	63	72	2.20	2.30	
	2.2	80	90	1.85	2.15	
	3.3	140	155	1.45	1.70	
	4.7	190	212	1.20	1.50	
	6.0	260	288	1.10	1.35	
6.8	325	370	1.00	1.15		
10.0	360	410	0.75	0.85		
22.0	910	1050	0.50	0.56		
	1.0	55	68	2.00	1.50	
	1.5	65	75	1.45	1.35	
	2.2	90	105	1.30	1.10	
	3.3	130	150	1.20	0.90	
	4.7	170	200	1.00	0.75	
	6.8	200	230	0.90	0.65	
	10.0	300	340	0.80	0.52	
15.0	500	570	0.65	0.40		
22.0	650	750	0.50	0.35		
33.0	1000	1250	0.40	0.30		
47.0	1800	2050	0.35	0.235		
	2.2	82	98	1.90	1.70	
	3.3	100	120	1.70	1.50	
	4.7	130	156	1.40	1.20	
	6.8	190	228	1.20	1.00	
	10.0	280	336	1.00	0.80	
22.0	630	756	0.67	0.55		
	0.56	17	22	5.40	5.50	
	1.0	20	25	3.80	3.80	
	1.2	25	30	3.60	3.60	
	2.2	35	45	3.00	3.00	
	3.3	45	56	2.70	2.40	
	4.7	70	90	2.20	2.00	
	6.8	90	115	1.90	1.50	
	8.2	105	132	1.40	1.40	
	10.0	135	170	1.30	1.30	
	15.0	185	222	1.25	1.00	
	22.0	250	315	1.20	0.83	
33.0	405	486	0.90	0.68		
47.0	495	594	0.80	0.56		

**Notes**

- (1) All test data is referenced to 25 °C ambient
- (2) Operating temperature range - 55 °C to + 125 °C
- (3) DC current (A) that will cause an approximate Δ T of 40 °C
- (4) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

- (5) The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.