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Vishay Dale

# Low Profile, Shielded Ferrite Power Inductors



#### **LINKS TO ADDITIONAL RESOURCES**



#### **FEATURES**

- 4.0 mm x 4.0 mm x 1.8 mm SMD package
- Low profile inductors from 0.47 μH to 330 μH
- Wirewound ferrite core encapsulated with iron embedded epoxy for magnetic shielding
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>



#### **APPLICATIONS**

- DC/DC power supplies
- LCD displays
- Noise suppression and filtering
- · Lighting drivers
- Battery powered devices

STANDARD ELECTRICAL SPECIFICATIONS								
PART NUMBER	L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. I <sub>DC</sub> (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. I <sub>SAT</sub> (A) <sup>(2)</sup>			
IFSC1515AHERR47M01	0.47	15	18	5.5	5.70			
IFSC1515AHERR56M01	0.56	17	22	5.40	5.60			
IFSC1515AHERR68M01	0.68	19	25	5.00	5.50			
IFSC1515AHER1R0M01	1.0	20	25	4.30	3.85			
IFSC1515AHER1R2M01	1.2	25	30	3.80	3.70			
IFSC1515AHER1R5M01	1.5	33	40	3.40	3.60			
IFSC1515AHER1R8M01	1.8	34	41	3.20	3.20			
IFSC1515AHER2R2M01	2.2	35	45	3.10	3.10			
IFSC1515AHER3R3M01	3.3	45	56	2.75	2.45			
IFSC1515AHER4R7M01	4.7	69	89	2.30	2.05			
IFSC1515AHER6R8M01	6.8	90	115	2.10	1.75			
IFSC1515AHER8R2M01	8.2	105	132	1.80	1.65			
IFSC1515AHER100M01	10.0	134	169	1.50	1.55			
IFSC1515AHER150M01	15.0	185	222	1.45	1.10			
IFSC1515AHER220M01	22.0	250	315	1.20	0.95			
IFSC1515AHER330M01	33.0	405	486	0.90	0.70			
IFSC1515AHER470M01	47.0	495	594	0.80	0.58			
IFSC1515AHER680M01	68.0	885	1062	0.58	0.48			
IFSC1515AHER101M01	100.0	1545	1854	0.52	0.46			
IFSC1515AHER221M01	220.0	3150	3780	0.30	0.33			
IFSC1515AHER331M01	330.0	4200	5040	0.29	0.26			

#### Notes

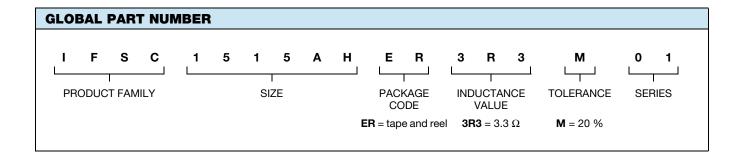
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- Resistance to solder heat: 260 °C for 10 s (3 times max. through reflow)
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  of 40 °C
- (2) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %



**DIMENSIONS** in inches [millimeters] 0.071 ± 0.004 [1.8 ± 0.1] 0.157 ± 0.008 [4.0 ± 0.2] 0.071 (1.8) 0.157 ± 0.008 [4.0 ± 0.2] 0.142 (3.6) 0.118 ± 0.014 [3.0 ± 0.35] 0.161 (4.1)

DESCRIPTION								
IFSC-1515AH-01	3.3 µH	± 20 %	ER	e3				
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD				

 $0.043 \pm 0.014$ [1.1 ± 0.35]





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