

## High Current, Surface Mount Inductors



| STANDARD ELECTRICAL SPECIFICATIONS |              |                        |                                 |
|------------------------------------|--------------|------------------------|---------------------------------|
| IND. AT 1 kHz (μH)                 | DCR MAX. (Ω) | RATED CURRENT MAX. (A) | INCREMENTAL CURRENT APPROX. (A) |
| 1.0                                | 0.010        | 9.0                    | 6.2                             |
| 1.2                                | 0.011        | 8.8                    | 5.6                             |
| 1.5                                | 0.012        | 8.7                    | 5.0                             |
| 1.8                                | 0.013        | 8.6                    | 4.4                             |
| 2.2                                | 0.015        | 8.5                    | 4.0                             |
| 2.7                                | 0.017        | 8.4                    | 3.7                             |
| 3.3                                | 0.020        | 8.3                    | 3.4                             |
| 3.9                                | 0.021        | 7.9                    | 3.1                             |
| 4.7                                | 0.023        | 7.4                    | 2.8                             |
| 5.6                                | 0.024        | 7.0                    | 2.6                             |
| 6.8                                | 0.038        | 6.1                    | 2.3                             |
| 8.2                                | 0.047        | 5.1                    | 2.0                             |
| 10.0                               | 0.053        | 4.3                    | 1.8                             |
| 12.0                               | 0.068        | 3.9                    | 1.7                             |
| 15.0                               | 0.078        | 3.5                    | 1.6                             |
| 18.0                               | 0.083        | 3.2                    | 1.5                             |
| 22.0                               | 0.12         | 2.8                    | 1.3                             |
| 27.0                               | 0.14         | 2.3                    | 1.2                             |
| 33.0                               | 0.17         | 1.9                    | 1.1                             |
| 39.0                               | 0.19         | 1.8                    | 1.03                            |
| 47.0                               | 0.215        | 1.77                   | 0.93                            |
| 56.0                               | 0.236        | 1.71                   | 0.90                            |
| 68.0                               | 0.305        | 1.43                   | 0.82                            |
| 82.0                               | 0.357        | 1.14                   | 0.75                            |
| 100.0                              | 0.452        | 0.95                   | 0.68                            |
| 120.0                              | 0.530        | 0.88                   | 0.63                            |
| 150.0                              | 0.609        | 0.82                   | 0.58                            |
| 180.0                              | 0.809        | 0.75                   | 0.54                            |
| 220.0                              | 1.10         | 0.69                   | 0.48                            |
| 270.0                              | 1.27         | 0.64                   | 0.43                            |
| 330.0                              | 1.42         | 0.59                   | 0.38                            |
| 390.0                              | 1.89         | 0.54                   | 0.34                            |
| 470.0                              | 2.21         | 0.49                   | 0.31                            |
| 560.0                              | 2.42         | 0.46                   | 0.28                            |
| 680.0                              | 2.73         | 0.43                   | 0.25                            |
| 820.0                              | 3.78         | 0.40                   | 0.23                            |
| 1000.0                             | 4.20         | 0.37                   | 0.21                            |
| 1200.0                             | 5.51         | 0.32                   | 0.19                            |
| 1500.0                             | 7.35         | 0.29                   | 0.17                            |
| 1800.0                             | 8.66         | 0.25                   | 0.16                            |
| 2200.0                             | 9.71         | 0.22                   | 0.14                            |
| 2700.0                             | 11.29        | 0.20                   | 0.13                            |
| 3300.0                             | 15.60        | 0.18                   | 0.12                            |
| 3900.0                             | 20.74        | 0.16                   | 0.11                            |
| 4700.0                             | 23.10        | 0.14                   | 0.10                            |

**Note**

- Contact factory for values above 47 000 μH

| DESCRIPTION |                  |                      |              |                               |
|-------------|------------------|----------------------|--------------|-------------------------------|
| IHSM-5832   | 3.9 μH           | ± 15 %               | ER           | e3                            |
| MODEL       | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER |   |   |   |      |
|--------------------|---|---|---|------|
| I                  | H | S | M |      |
| PRODUCT FAMILY     |   |   |   |      |
| 5                  | 8 | 3 | 2 |      |
| SIZE               |   |   |   |      |
| E                  | R |   |   |      |
| PACKAGE CODE       |   |   |   |      |
| 3                  | R | 9 |   |      |
| INDUCTANCE VALUE   |   |   |   |      |
|                    |   |   | L |      |
|                    |   |   |   | TOL. |

**FEATURES**

- Flame retardant encapsulant (UL 94 V-0)
- Completely encapsulated winding provides superior environmental protection and moisture resistance
- High current unit in surface mount package printed with model, inductance value and date code
- Compatible with infrared or conventional reflow soldering methods
- Pick and place compatible
- Tape and reel packaging for automatic handling
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

**APPLICATIONS**

Excellent power line noise filters, filters for switching regulated power supplies, dc-to-dc converters, SCR and Triac controls and RFI suppression.

**ELECTRICAL SPECIFICATIONS**

**Inductance:** Measured at 1 V with no DC current

**Inductance Tolerance:** ± 15 %

**Incremental Current:** The typical current at which the inductance will be decreased by 5 % from its initial zero DC value

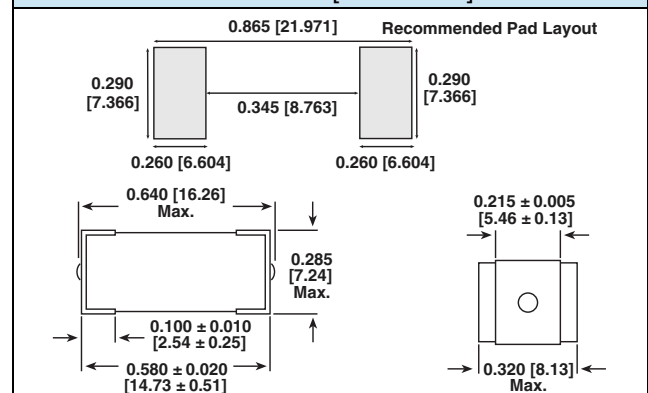
**Operating Temperature:** - 55 °C to + 125 °C (no load); - 55 °C to + 85 °C (at full rated current)

**MECHANICAL SPECIFICATIONS**

**Core:** High resistivity ferrite core

**Encapsulant:** Epoxy

**Terminals:** 100 % Sn over Ni

**DIMENSIONS** in inches [millimeters]

**PART MARKING**

- Model
- Inductance value
- Date code



## Disclaimer

All product specifications and data are subject to change without notice.

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