

## 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                                | 0.013        | 8.6                    | 4.1                             |
| 1.2                                | 0.018        | 7.6                    | 3.8                             |
| 1.5                                | 0.02         | 6.9                    | 3.5                             |
| 1.8                                | 0.021        | 6.5                    | 3.2                             |
| 2.2                                | 0.029        | 5.7                    | 2.9                             |
| 2.7                                | 0.034        | 5.1                    | 2.6                             |
| 3.3                                | 0.038        | 4.6                    | 2.4                             |
| 3.9                                | 0.042        | 4.3                    | 2.2                             |
| 4.7                                | 0.047        | 4.0                    | 2.0                             |
| 5.6                                | 0.051        | 3.8                    | 1.9                             |
| 6.8                                | 0.058        | 3.5                    | 1.7                             |
| 8.2                                | 0.063        | 3.3                    | 1.5                             |
| 10.0                               | 0.071        | 3.1                    | 1.4                             |
| 12.0                               | 0.079        | 2.7                    | 1.3                             |
| 15.0                               | 0.089        | 2.3                    | 1.2                             |
| 18.0                               | 0.119        | 1.9                    | 1.1                             |
| 22.0                               | 0.152        | 1.7                    | 1.02                            |
| 27.0                               | 0.179        | 1.6                    | 0.95                            |
| 33.0                               | 0.222        | 1.3                    | 0.88                            |
| 39.0                               | 0.315        | 1.19                   | 0.8                             |
| 47.0                               | 0.362        | 1.07                   | 0.74                            |
| 56.0                               | 0.397        | 0.95                   | 0.68                            |
| 68.0                               | 0.446        | 0.87                   | 0.62                            |
| 82.0                               | 0.604        | 0.8                    | 0.56                            |
| 100.0                              | 0.672        | 0.73                   | 0.5                             |
| 120.0                              | 0.735        | 0.66                   | 0.45                            |
| 150.0                              | 0.998        | 0.58                   | 0.4                             |
| 180.0                              | 1.37         | 0.5                    | 0.35                            |
| 220.0                              | 1.58         | 0.46                   | 0.32                            |
| 270.0                              | 1.77         | 0.41                   | 0.3                             |
| 330.0                              | 2.51         | 0.37                   | 0.28                            |
| 390.0                              | 2.73         | 0.34                   | 0.26                            |
| 470.0                              | 3.36         | 0.32                   | 0.24                            |
| 560.0                              | 3.75         | 0.3                    | 0.23                            |
| 680.0                              | 4.31         | 0.28                   | 0.2                             |
| 820.0                              | 6.04         | 0.26                   | 0.17                            |
| 1000.0                             | 6.9          | 0.24                   | 0.15                            |

### 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/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)

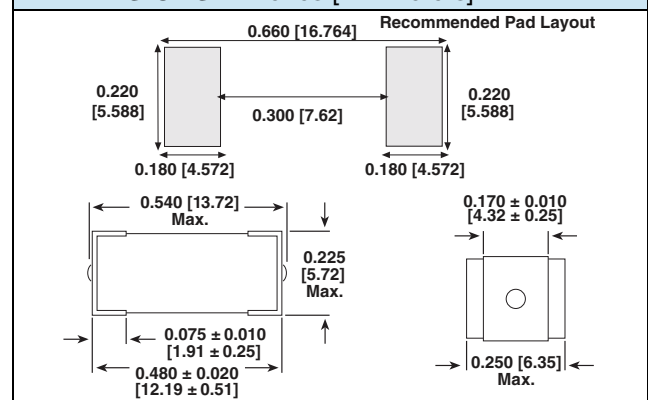
### MECHANICAL SPECIFICATIONS

**Core:** High resistivity ferrite core

**Encapsulant:** Epoxy

**Terminals:** 100 % Sn over Ni

### DIMENSIONS in inches [millimeters]



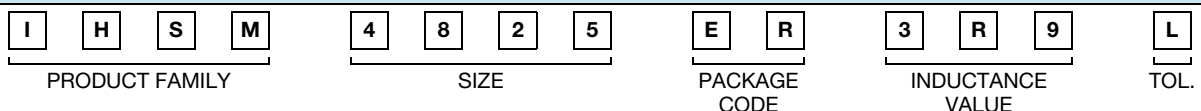
### PART MARKING

- Model
- Inductance value
- Date code

### DESCRIPTION

|                  |                  |                      |              |                               |
|------------------|------------------|----------------------|--------------|-------------------------------|
| <b>IHSM-4825</b> | <b>3.9 μH</b>    | <b>± 15 %</b>        | <b>ER</b>    | <b>e3</b>                     |
| MODEL            | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

### GLOBAL PART NUMBER





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