



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 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                                | 0.011        | 9.0                    | 5.3                             |
| 1.2                                | 0.012        | 8.8                    | 4.8                             |
| 1.5                                | 0.012        | 8.6                    | 4.4                             |
| 1.8                                | 0.013        | 8.5                    | 4.0                             |
| 2.2                                | 0.014        | 8.4                    | 3.6                             |
| 2.7                                | 0.016        | 8.2                    | 3.2                             |
| 3.3                                | 0.017        | 8.1                    | 2.8                             |
| 3.9                                | 0.02         | 7.3                    | 2.6                             |
| 4.7                                | 0.023        | 6.7                    | 2.4                             |
| 5.6                                | 0.025        | 6.0                    | 2.3                             |
| 6.8                                | 0.028        | 5.6                    | 2.1                             |
| 8.2                                | 0.032        | 5.3                    | 1.9                             |
| 10.0                               | 0.036        | 5.0                    | 1.7                             |
| 12.0                               | 0.04         | 4.8                    | 1.5                             |
| 15.0                               | 0.043        | 4.5                    | 1.4                             |
| 18.0                               | 0.047        | 4.2                    | 1.3                             |
| 22.0                               | 0.054        | 3.8                    | 1.2                             |
| 27.0                               | 0.074        | 3.4                    | 1.1                             |
| 33.0                               | 0.084        | 3.0                    | 0.99                            |
| 39.0                               | 0.095        | 2.8                    | 0.93                            |
| 47.0                               | 0.12         | 2.6                    | 0.87                            |
| 56.0                               | 0.14         | 2.4                    | 0.82                            |
| 68.0                               | 0.16         | 2.1                    | 0.76                            |
| 82.0                               | 0.184        | 1.9                    | 0.72                            |
| 100.0                              | 0.226        | 1.7                    | 0.68                            |
| 120.0                              | 0.305        | 1.5                    | 0.61                            |
| 150.0                              | 0.362        | 1.4                    | 0.54                            |
| 180.0                              | 0.399        | 1.3                    | 0.48                            |
| 220.0                              | 0.536        | 1.1                    | 0.44                            |
| 270.0                              | 0.599        | 0.95                   | 0.4                             |
| 330.0                              | 0.714        | 0.86                   | 0.36                            |
| 390.0                              | 0.819        | 0.8                    | 0.33                            |
| 470.0                              | 1.1          | 0.74                   | 0.31                            |
| 560.0                              | 1.2          | 0.68                   | 0.29                            |
| 680.0                              | 1.58         | 0.63                   | 0.26                            |
| 820.0                              | 2.08         | 0.573                  | 0.23                            |
| 1000.0                             | 2.42         | 0.51                   | 0.21                            |
| 1200.0                             | 2.68         | 0.46                   | 0.19                            |
| 1500.0                             | 3.15         | 0.4                    | 0.17                            |
| 1800.0                             | 4.2          | 0.34                   | 0.15                            |
| 2200.0                             | 4.62         | 0.31                   | 0.135                           |
| 2700.0                             | 6.3          | 0.29                   | 0.12                            |
| 3300.0                             | 7.09         | 0.27                   | 0.11                            |
| 3900.0                             | 9.14         | 0.25                   | 0.1                             |
| 4700.0                             | 10.6         | 0.23                   | 0.09                            |
| 5600.0                             | 11.8         | 0.21                   | 0.08                            |
| 6800.0                             | 15.8         | 0.19                   | 0.0775                          |
| 8200.0                             | 21.8         | 0.17                   | 0.0725                          |
| 10 000.0                           | 24.6         | 0.16                   | 0.07                            |
| 12 000.0                           | 28.4         | 0.14                   | 0.0625                          |
| 15 000.0                           | 37.8         | 0.12                   | 0.055                           |
| 18 000.0                           | 44.1         | 0.11                   | 0.05                            |

### 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
- 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)

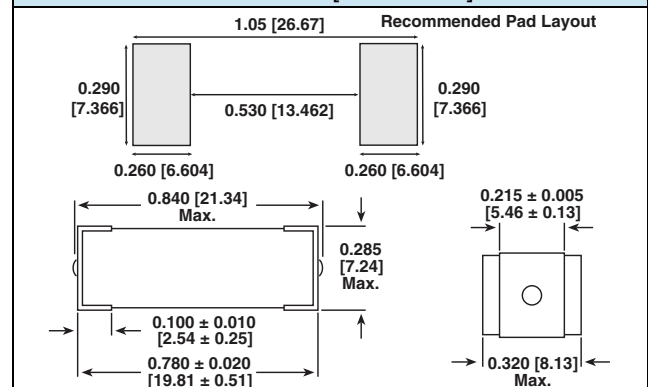
### MECHANICAL SPECIFICATIONS

**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-7832</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

|                |          |          |          |          |          |          |          |              |          |                  |          |          |          |
|----------------|----------|----------|----------|----------|----------|----------|----------|--------------|----------|------------------|----------|----------|----------|
| <b>I</b>       | <b>H</b> | <b>S</b> | <b>M</b> | <b>7</b> | <b>8</b> | <b>3</b> | <b>2</b> | <b>E</b>     | <b>R</b> | <b>3</b>         | <b>R</b> | <b>9</b> | <b>L</b> |
| PRODUCT FAMILY |          |          |          | SIZE     |          |          |          | PACKAGE CODE |          | INDUCTANCE VALUE |          |          | TOL.     |



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