






-  Suitable for DC/DC conversions in notebook computers, or portable handheld devices.
-  High performance and small size for surface mounting applications
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1.05 to 1030 micro H
-  RoHS compliant versions are available



**ELECTRICAL SPECIFICATION @ 25°C**

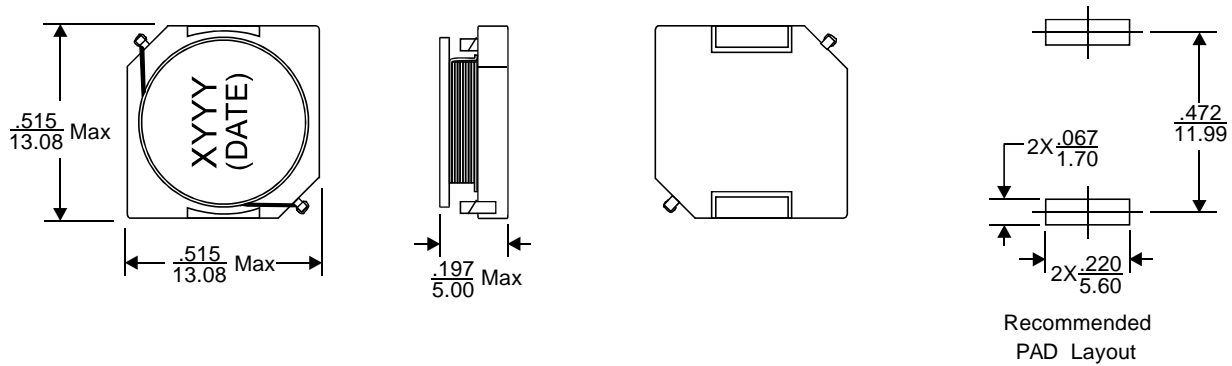
| Part Number   | RoHS Part Number | Inductance <sup>1</sup><br>L (uH ± 20%) | DCR (mΩ)<br>Max | Saturation <sup>2</sup><br>Current, Isat (A) | Rated Current, Irms (A) | Marking (YYYY) |
|---------------|------------------|---|-----------------|--|-------------------------|----------------|
| UISP0648M-102 | UISP0648M-102F   | 1.05                                    | 5.5             | 17.7   | 12.2                    | M102           |
| UISP0648M-192 | UISP0648M-192F   | 1.9                                     | 7.5             | 12.9   | 9.6                     | M192           |
| UISP0648M-282 | UISP0648M-282F   | 2.8                                     | 9.8             | 10.5   | 8.1                     | M282           |
| UISP0648M-342 | UISP0648M-342F   | 3.4                                     | 9.6             | 9.1  | 7.6                     | M342           |
| UISP0648M-462 | UISP0648M-462F   | 4.6                                     | 15.5            | 7.8  | 6.5                     | M462           |
| UISP0648M-682 | UISP0648M-682F   | 6.8                                     | 22              | 6.6  | 5.1                     | M682           |
| UISP0648M-103 | UISP0648M-103F   | 10.2                                    | 33              | 5.4  | 4.3                     | M103           |
| UISP0648M-153 | UISP0648M-153F   | 15.2                                    | 44              | 4.4  | 3.6                     | M153           |
| UISP0648M-223 | UISP0648M-223F   | 22                                      | 61              | 3.7  | 3.3                     | M223           |
| UISP0648M-323 | UISP0648M-323F   | 32                                      | 90              | 2.9  | 2.5                     | M323           |
| UISP0648M-463 | UISP0648M-463F   | 46                                      | 148             | 2.4  | 2.1                     | M463           |
| UISP0648M-653 | UISP0648M-653F   | 65                                      | 166             | 2.0  | 1.8                     | M653           |
| UISP0648M-104 | UISP0648M-104F   | 100                                     | 262             | 1.7  | 1.4                     | M104           |
| UISP0648M-154 | UISP0648M-154F   | 152                                     | 410             | 1.3  | 1.2                     | M154           |
| UISP0648M-214 | UISP0648M-214F   | 214                                     | 557             | 1.1  | 1.0                     | M214           |
| UISP0648M-324 | UISP0648M-324F   | 320                                     | 880             | 0.9  | 0.9                     | M324           |
| UISP0648M-454 | UISP0648M-454F   | 450                                     | 1230            | 0.8  | 0.7                     | M454           |
| UISP0648M-644 | UISP0648M-644F   | 645                                     | 1660            | 0.6  | 0.6                     | M644           |
| UISP0648M-105 | UISP0648M-105F   | 1030                                    | 2680            | 0.5  | 0.5                     | M105           |

**Notes:**

1. Inductance is measured at 100kHz, 0.01Vrms.
2. Inductance drops 10% typical at Isat.
3. Operating temperature range: -40°C to +130°C.
4. Contact EEMPL for RoHS compliant version availability.
5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature 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.



MECHANICAL DIMENSIONS

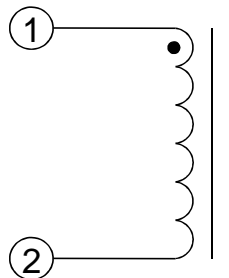


Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .
- For available RoHS part number, the part will be marked with "YYYYF", instead of "YYYY".

|                  |   |            |
|------------------|---|------------|
| Weight (in gram) | : | 2.5 typ.   |
| Tape & Reel      | : | 700 / reel |

SCHEMATICS



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER  
2/F Block A, Merit Industrial Centre,  
94 Tokwawan Road, Kowloon,  
Hong Kong  
Tel: (852) 2765 3888  
Fax: (852) 2954 3304  
Email: eempl@eleceltek.com  
Website: <http://www.eleceltek.com>

Information herein is for reference only and subject to change without notice. It does not constitute any representation, warranty or commitment of the company in respect of the products in any aspect. All logos, brands and product names mentioned herein are trademarks or registered trademarks of their respective owners. The company does not assume any liability arising out of the application or use of any product or circuit described herein. Copyrights 2006, E & E Magnetic Products Limited.