




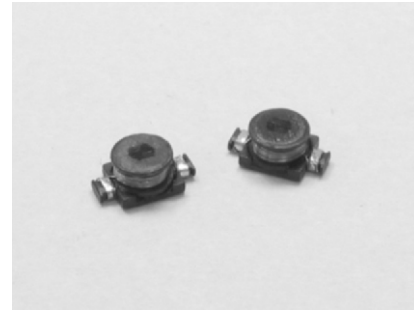


-  Suitable for DC/DC conversion in notebook computers, PDAs and other handheld devices
-  Unshielded and self-leaded design with high energy storage
-  High performance and flat top for pick and place handling
-  Inductance range from 1 to 1000 micro H
-  RoHS compliant



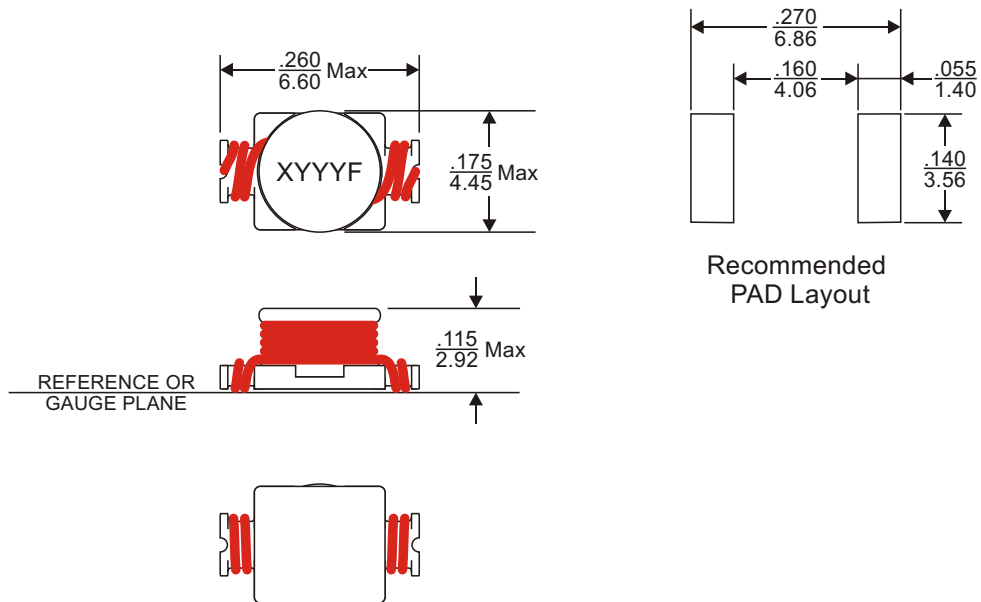
**ELECTRICAL SPECIFICATION @ 25°C**

| Part Number   | Inductance <sup>2</sup><br>L (uH ± 20%) | DCR<br>( $\Omega$ )<br>Max | SRF<br>(MHz)<br>Typ | Isat <sup>3</sup><br>(A) | Irms <sup>4</sup><br>(A) | Marking<br>(YYYY) |
|---------------|---|----------------------------|---------------------|--------------------------|--------------------------|-------------------|
| UIS1608M-102F | 1.0                                     | 0.05                       | 130                 | 2.90                     | 2.90                     | M102              |
| UIS1608M-152F | 1.5                                     | 0.05                       | 115                 | 2.60                     | 2.80                     | M152              |
| UIS1608M-222F | 2.2                                     | 0.07                       | 90                  | 2.30                     | 2.40                     | M222              |
| UIS1608M-332F | 3.3                                     | 0.08                       | 70                  | 2.00                     | 2.00                     | M332              |
| UIS1608M-472F | 4.7                                     | 0.09                       | 50                  | 1.50                     | 1.50                     | M472              |
| UIS1608M-682F | 6.8                                     | 0.13                       | 45                  | 1.20                     | 1.40                     | M682              |
| UIS1608M-103F | 10                                      | 0.16                       | 35                  | 1.10                     | 1.10                     | M103              |
| UIS1608M-153F | 15                                      | 0.23                       | 30                  | 0.90                     | 1.20                     | M153              |
| UIS1608M-223F | 22                                      | 0.37                       | 20                  | 0.70                     | 0.80                     | M223              |
| UIS1608M-333F | 33                                      | 0.51                       | 15                  | 0.58                     | 0.60                     | M333              |
| UIS1608M-473F | 47                                      | 0.64                       | 14                  | 0.50                     | 0.50                     | M473              |
| UIS1608M-683F | 68                                      | 0.86                       | 11                  | 0.40                     | 0.40                     | M683              |
| UIS1608M-104F | 100                                     | 1.27                       | 9                   | 0.31                     | 0.30                     | M104              |
| UIS1608M-154F | 150                                     | 2.00                       | 6                   | 0.27                     | 0.25                     | M154              |
| UIS1608M-224F | 220                                     | 3.11                       | 5.5                 | 0.22                     | 0.20                     | M224              |
| UIS1608M-334F | 330                                     | 3.80                       | 5                   | 0.18                     | 0.16                     | M334              |
| UIS1608M-474F | 470                                     | 5.06                       | 4                   | 0.16                     | 0.15                     | M474              |
| UIS1608M-684F | 680                                     | 9.20                       | 3                   | 0.14                     | 0.12                     | M684              |
| UIS1608M-105F | 1000                                    | 13.8                       | 2                   | 0.10                     | 0.07                     | M105              |

**Notes:**

1. Ordering Information: UIS1608a - bbbFc.  
 UIS1608 = Product Type.  
 a = Tolerance of Inductance (M= ±20%).  
 bbb = Inductance value in uH (i.e. 472 = 4.7uH; 473 = 47uH; 474 = 470uH; 105 = 1000uH).  
 F = Internal Control Code.  
 c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel; T = Tape & Reel Packaging in 13 inch).
2. Inductance is tested at 100kHz, 0.1Vrms.
3. Inductance drops 10% typical at Isat.
4. T=15°C rise typical at Irms.
5. Operating temperature range: -40°C to +125°C.

**MECHANICAL DIMENSIONS**

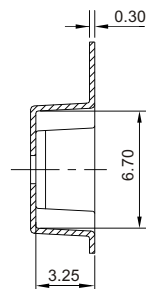
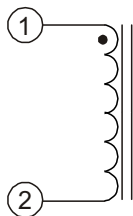


**Notes:**

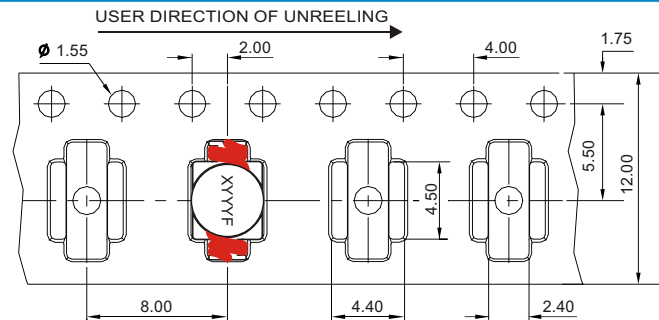
6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm 0.25 \cdot$

|                    |                 |
|--------------------|-----------------|
| Weight (in gram) : | 0.2 typ.        |
| Tape & Reel :      | 2500 / 13" reel |
| Tape & Reel :      | 650 / 7" reel   |

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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