






-  Suitable for DC/DC converters, industrial products and handheld devices.
-  Unshielded and small footprint with high energy storage and low resistance
-  Superior performance and self-leaded design for surface mounting applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

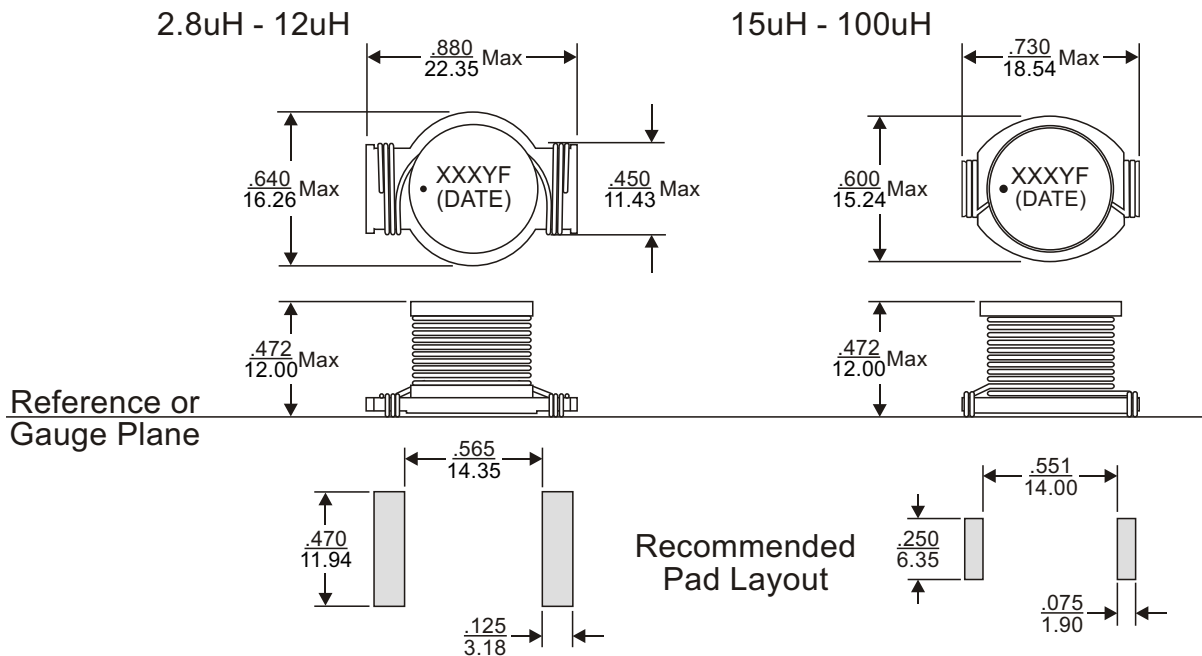
Part Number	Inductance <sup>2</sup> L ( H)	Inductance	DCR (m ) Max	SRF (MHz) Typ.	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (XXXY)
		Tolerances(%) M					
UIS5005-282MF	2.8	±20	5.2	65	33.4	12.1	282M
UIS5005-392MF	3.9	±20	6.0	40	26.8	11.2	392M
UIS5005-682MF	6.8	±20	9.0	30	22.5	9.6	682M
UIS5005-103MF	10	±20	11	22	17.8	8.6	103M
UIS5005-123MF	12	±20	13	21	15.9	7.4	123M
UIS5005-153MF	15	±20	20	18	13.8	6.5	153M
UIS5005-183MF	18	±20	22	14	13.2	6.0	183M
UIS5005-223MF	22	±20	24	13	11.8	5.7	223M
UIS5005-333MF	33	±20	37	10	9.6	4.5	333M
UIS5005-473MF	47	±20	52	8.0	7.8	3.7	473M
UIS5005-683MF	68	±20	67	7.0	6.7	3.4	683M
UIS5005-104MF	100	±20	115	6.0	5.6	2.8	104M

**Notes:**

1. Ordering Information: UIS5005 - bbbaFc.  
 UIS5005 = Product Type.  
 a = Tolerance of Inductance (M = ±20%).  
 bbb = Inductance value in uH (i.e. 682 = 6.8uH; 683 = 68uH; 104 = 100uH)  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
2. Inductance is tested at 100kHz, 0.1Vrms, 0A<sub>dc</sub>.
3. Saturation current, Isat, is the current at which the inductance of the component drops by 10% typical at an ambient temperature of 25 C.
4. Heating current, Irms, is the current required to raise the component temperature by approximately 40 C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
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**

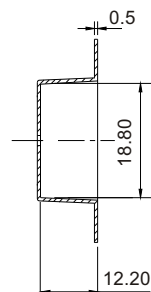
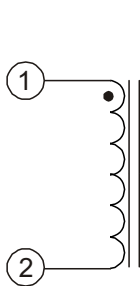


**Notes:**

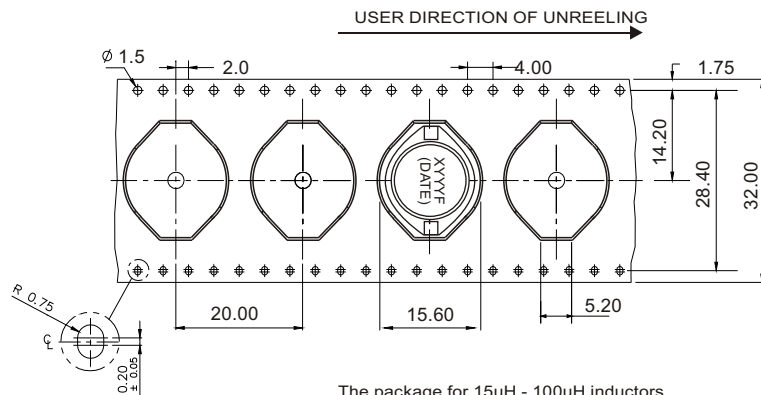
5. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
6. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 7.0 typ.
Tape & Reel	: 160 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

**HEADQUARTER**

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