




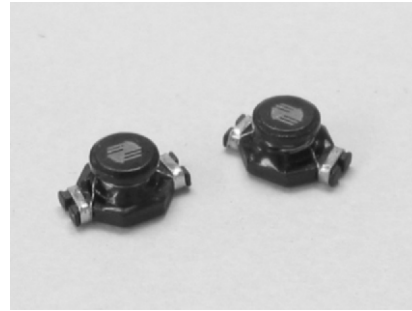


-  Suitable for DC/DC conversions in portable computers, camcorders or other communication equipments.
-  High performance and small size with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 0.18 to 47 micro H
-  RoHS compliant



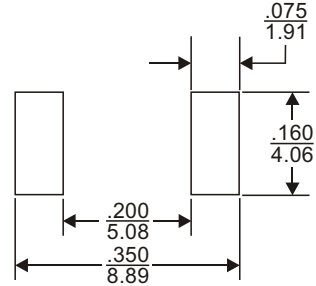
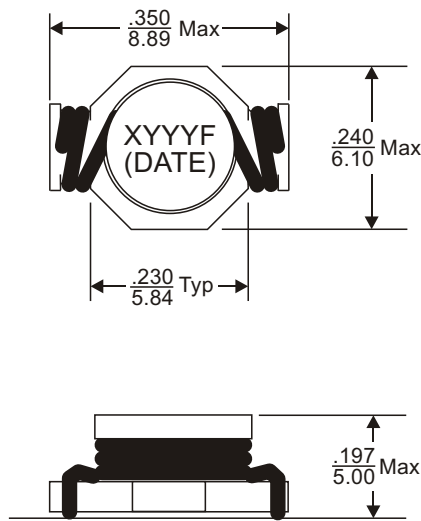
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance L (uH) Ref.	Inductance <sup>2</sup> L (uH ± 20%)	DCR (m Ω) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS1813HCM-181F	0.18	0.18	3.0	800	14.0	10.0	M181
UIS1813HCM-331F	0.33	0.33	4.0	600	10.0	7.0	M331
UIS1813HCM-561F	0.56	0.56	10	200	7.7	6.0	M561
UIS1813HCM-122F	1.20	1.15	17	140	5.3	4.4	M122
UIS1813HCM-222F	2.20	2.06	35	100	3.5	3.1	M222
UIS1813HCM-332F	3.30	3.20	40	80	3.0	2.7	M332
UIS1813HCM-472F	4.70	4.70	54	50	2.6	2.2	M472
UIS1813HCM-682F	6.80	6.80	80	45	2.2	1.8	M682
UIS1813HCM-103F	10.0	9.55	110	40	1.9	1.5	M103
UIS1813HCM-153F	15.0	15.3	170	30	1.5	1.2	M153
UIS1813HCM-223F	22.0	22.6	250	25	1.2	1.0	M223
UIS1813HCM-333F	33.0	32.5	350	20	0.99	0.82	M333
UIS1813HCM-473F	47.0	48.1	470	15	0.87	0.72	M473

**Notes:**

1. Ordering Information: UIS1813HCa - bbbFc.  
UIS1813HC = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 331 = 0.33uH; 332 = 3.30uH; 333 = 33.0uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
2. Inductance is tested at 0.25Vrms, 100kHz.
3. Isat is peak current for approximately 30% roll-off.
4. T=40°C rise typical at Irms.
5. Operating temperature range: -40°C to +125°C.
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.

**MECHANICAL DIMENSIONS**



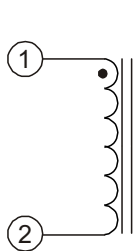
**Recommended  
PAD Layout**

**Notes:**

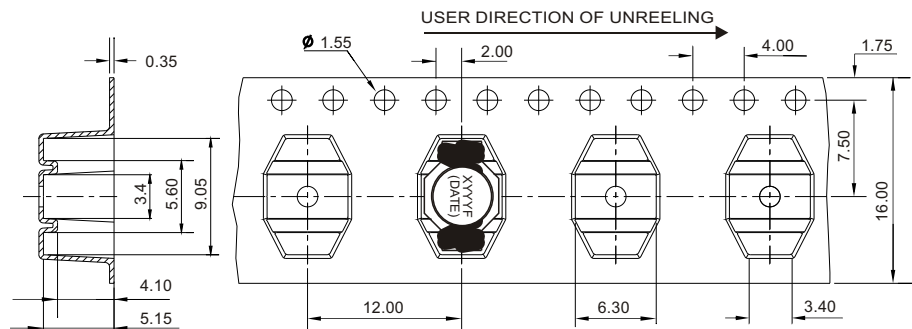
- 7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- 8. Unless otherwise specified, all tolerances are  $\pm 0.010$ .

Weight (in gram)	: 0.7 typ.
Tape & Reel	: 1000 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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