



UNI-PAC

UNI-PAC 2 FAMILY TABLE

Part Number	Inductance μH (rated)	OCL ⁽¹⁾ $\mu\text{H} \pm 20\%$	I _{RMS} ⁽²⁾ Amperes	I _{SAT} ⁽³⁾ Amperes	DCR ⁽⁴⁾ Ohms max.
UP2-R47	0.47	0.595	10.1	11.4	0.0049
*UP2-1R0	1.0	1.00	9.0	9.9	0.0081
UP2-1R5	1.5	1.46	8.1	7.9	0.0103
*UP2-2R2	2.2	2.39	6.9	6.1	0.0115
UP2-3R3	3.3	3.23	6.5	5.1	0.0138
*UP2-4R7	4.7	4.77	5.7	4.2	0.0173
UP2-6R8	6.8	6.63	5.0	3.6	0.0230
*UP2-100	10.0	9.73	4.3	3.3	0.0299
*UP2-150	15.0	15.43	3.6	2.4	0.0449
*UP2-220	22.0	22.50	2.9	2.0	0.0644
*UP2-330	33.0	33.13	2.4	1.7	0.0989
*UP2-470	47.0	48.65	1.9	1.4	0.1461
UP2-680	68.0	68.17	1.7	1.2	0.1898
UP2-101	100.0	102.60	1.4	0.95	0.2772
UP2-151	150.0	152.70	1.1	0.78	0.4244
UP2-221	220.0	230.00	0.93	0.62	0.6360
UP2-331	330.0	338.00	0.76	0.51	0.9775

Notes: (1) Open Circuit Inductance Test Parameters: 100KHz, .250Vrms, 0.0Adc.

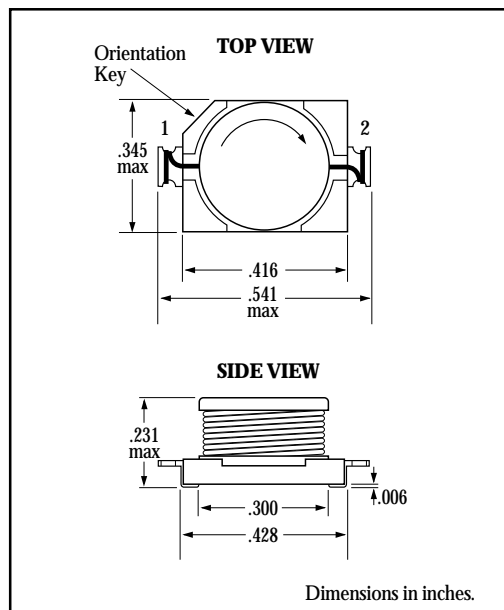
(2) RMS current for an approximate ΔT of 40°C. at an ambient temperature of 85°C.

(3) Peak current for approximately 10% rolloff.

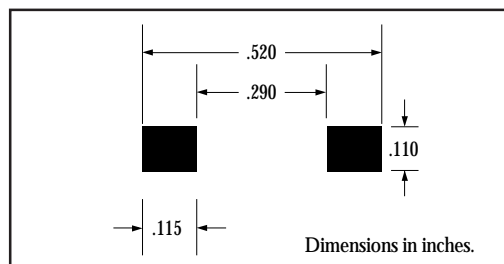
(4) DCR limits 20°C.

*BOLD are available from stock.

MECHANICAL DIAGRAM

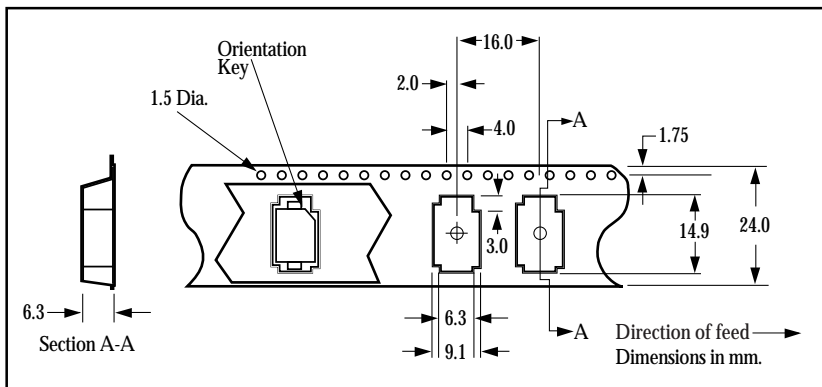


PCB PAD LAYOUT

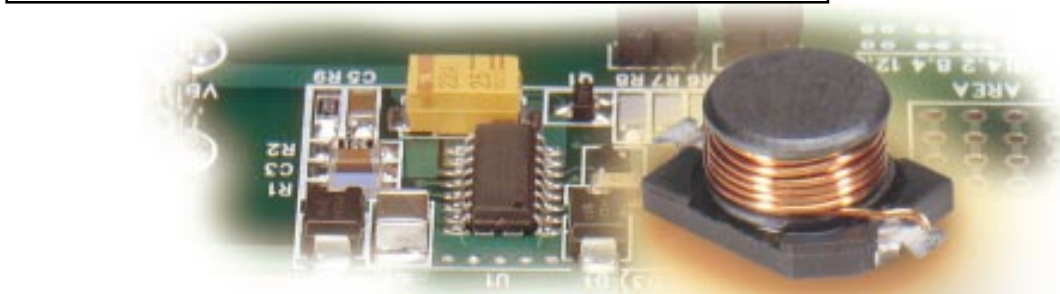
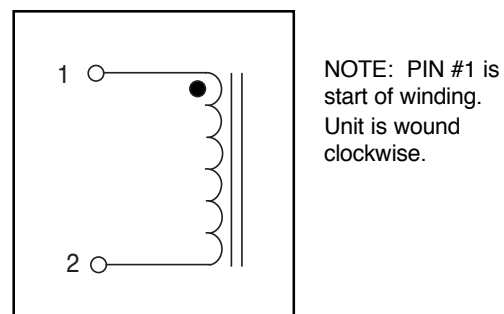


PACKAGING INFORMATION

Parts are packaged on 13" reels.
600 parts per reel.

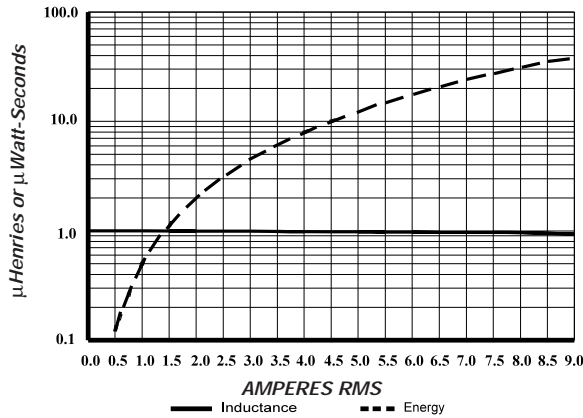


CONNECTION DIAGRAM



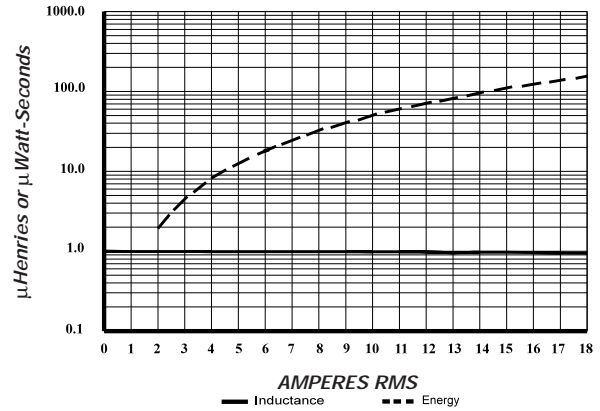
UP2-1R0

Typical Inductance & Energy vs RMS Amperes



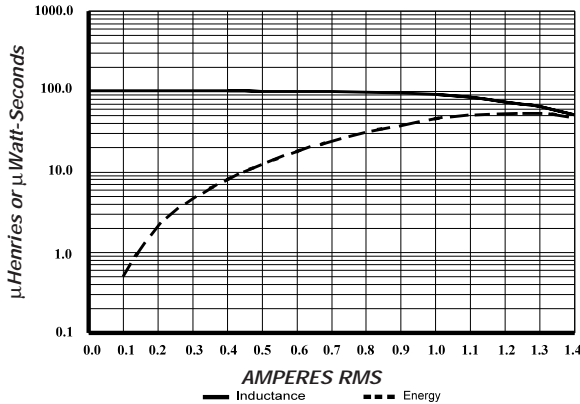
UP4-1R0

Typical Inductance & Energy vs RMS Amperes



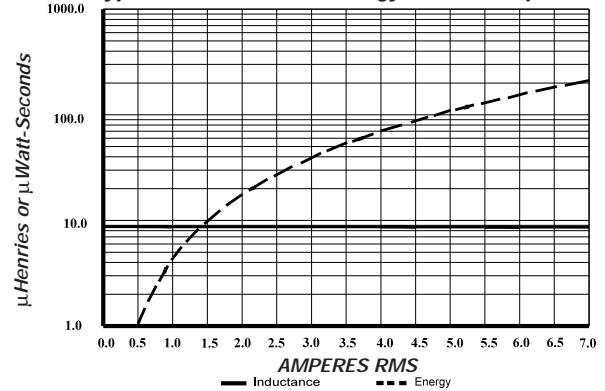
UP2-101

Typical Inductance & Energy vs RMS Amperes



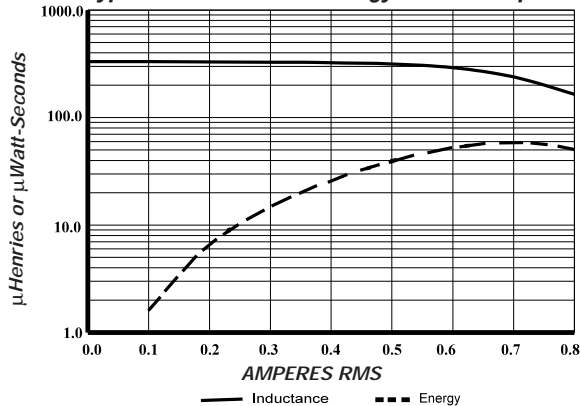
UP4-100

Typical Inductance & Energy vs RMS Amperes



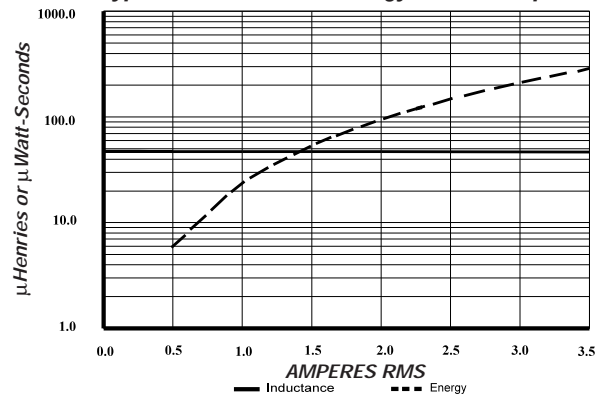
UP2-331

Typical Inductance & Energy vs RMS Amperes

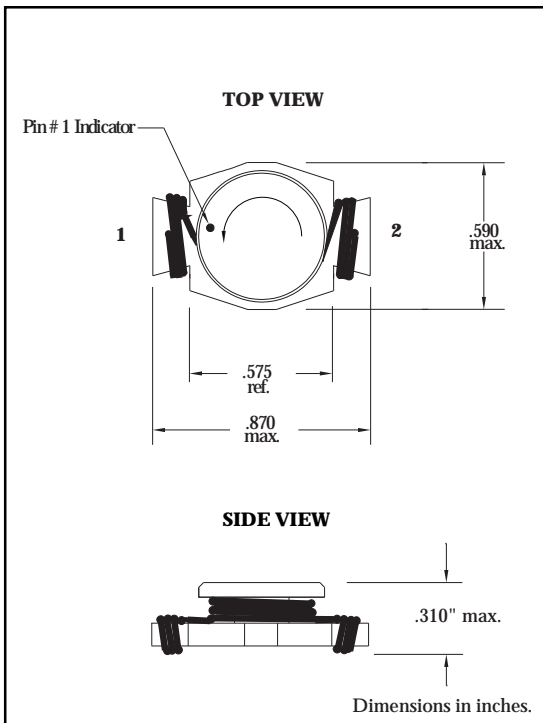


UP4-470

Typical Inductance & Energy vs RMS Amperes



MECHANICAL DIAGRAM



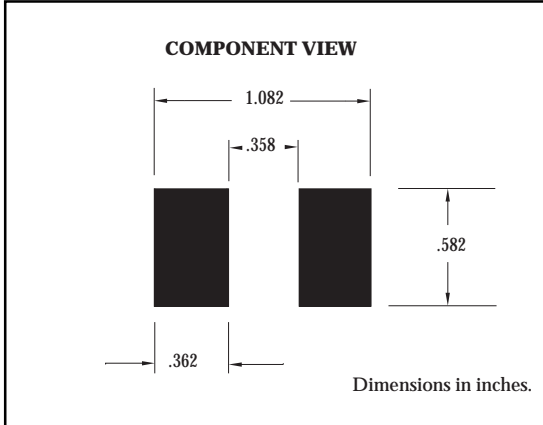
UNI-PAC 4 FAMILY TABLE

Part Number	Inductance μH (rated)	OCL ⁽¹⁾ $\mu\text{H} \pm 20\%$	I _{RMS} ⁽²⁾ Amperes	I _{SAT} ⁽³⁾ Amperes	DCR ⁽⁴⁾ Ohms max.
UP4-R47	0.47	0.473	19.2	51.7	0.0019
*UP4-1R0	1.0	0.916	17.3	37.3	0.0023
UP4-1R5	1.5	1.52	13.4	28.9	0.0039
*UP4-2R2	2.2	2.27	12.0	23.7	0.0048
UP4-3R3	3.3	3.14	11.0	20.2	0.0057
*UP4-4R7	4.7	5.34	8.6	15.6	0.0093
UP4-6R8	6.8	6.66	8.3	14.1	0.0100
*UP4-100	10.0	9.77	6.8	11.5	0.0150
*UP4-150	15.0	15.61	5.5	9.1	0.0230
*UP4-220	22.0	22.61	4.5	7.6	0.0340
*UP4-330	33.0	34.30	3.7	6.1	0.0520
*UP4-470	47.0	48.10	3.1	5.2	0.0740
UP4-680	68.0	69.14	2.4	4.3	0.1200
UP4-101	100.0	99.42	2.0	3.6	0.1700

Notes: (1) Open Circuit Inductance Test Parameters: 100KHz, .250Vrms, 0.0Adc.
 (2) RMS current for an approximate ΔT of 40°C. at an ambient temperature of 85°C.
 (3) Peak current for approximately 30% rolloff.
 (4) DCR limits 20°C.

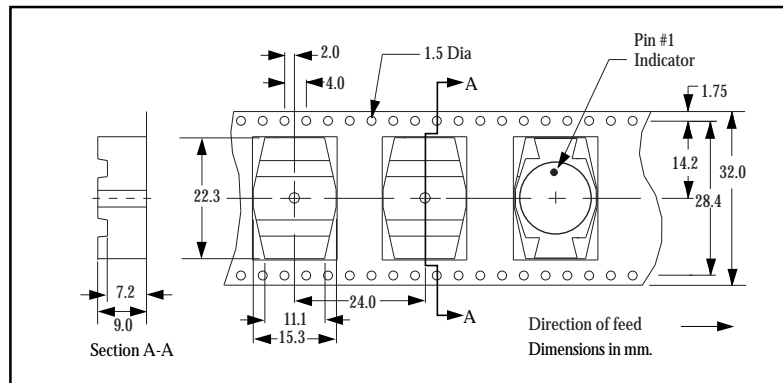
***BOLD** are available from stock.

PCB PAD LAYOUT

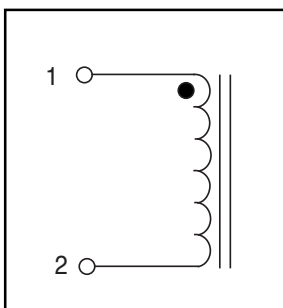


PACKAGING INFORMATION

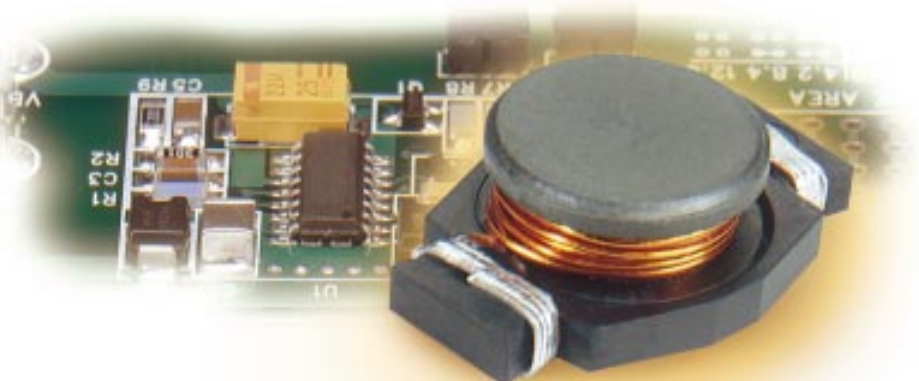
Parts are packaged on 13" reels.
 275 parts per reel.



CONNECTION DIAGRAM



NOTE: PIN #1 is start of winding.
 Unit is wound counter-clockwise.



GENERAL

UNI-PACs are surface mount inductors designed for use in applications requiring low inductance and high current in a miniature package. They can be used in DC/DC converters and as signal conditioning or filter inductors. Available standard inductance values range from 0.47 to 330.0 μ H. RMS current values range from 19.2 to 0.76 Amperes.

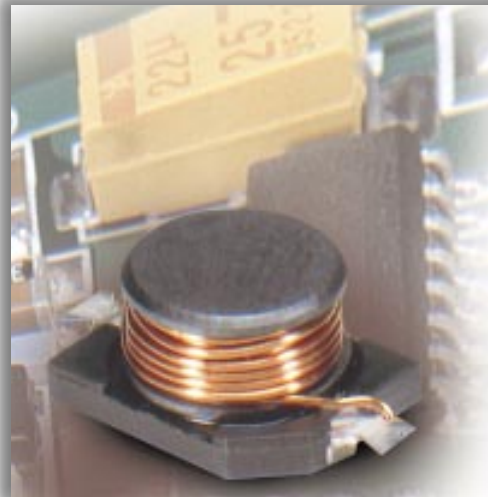
Because of their miniature size and rugged construction, UNI-PACs are ideally suited for products requiring higher power per millimeter of PCB space. Such applications include notebook computers, pagers, and a variety of battery powered equipment. Their versatility extends to use in DC/DC converters on all board level products from personal computers to industrial-level VME products.

UNI-PACs are engineered for high volume production using automated surface mount technology. Their tape-and-reel packaging accommodates reliable pick-and-place manufacturing, and their construction permits normal exposure to infrared reflow soldering to +240°C.

In addition to the standard inductance values shown, custom inductors are available to meet your exact high volume requirements.

FEATURE - BENEFITS

- Miniature Surface Mount Design
- Inductance Range from 0.47 μ H to 330 μ H
- Current Range from 760 mAmps to 19.2 Amps
- Maximum Power Density per Millimeter
- Supplied in Tape-and-Reel Packaging for Pick-and-Place Utilization



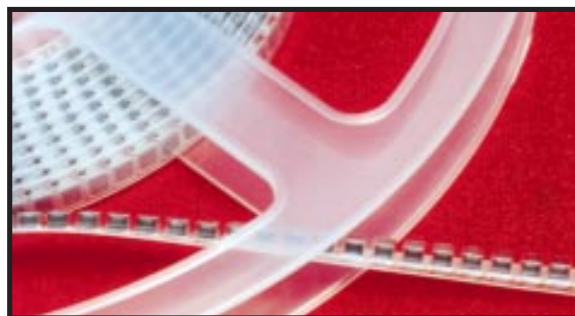
ENVIRONMENTAL SPECIFICATIONS

- Storage Temperature Range:
-40°C to +125°C.
- Operating Ambient Temperature Range:
-40°C to +85°C
Range is application specific
- Infrared Reflow Temperature:
+240°C for 30 seconds maximum
- Meets UL 94V-O Flammability Standard

DESIGN KITS AVAILABLE

To assist in prototyping, Coiltronics offers low-cost Design Kits for both the UP2 & UP4 product lines. Each Kit contains an assortment of inductance values complete with specifications. Coiltronics Design Kits can save hours to days of searching for parts and waiting on samples.

- Order Part Number UPK2-13330 for UNI-PAC 2
- Order Part Number UPK4-13424 for UNI-PAC 4



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