

Description

- Miniature surface mount design with rugged case to eliminate core breakage
- Inductance range from 0.470uH to 1000uH
- Current range up to 18.6 Amps peak
- Meets UL94V-0 flammability standard
- Ferrite core material



Applications

- PDA, computer, and flash memory programs

Environmental Data

- Storage temperature range: -40°C to +125°C
- Operating ambient temperature range: -40°C to +85°C (range is application specific)
- Solder reflow temperature: +260°C max. for 10 seconds max.



Packaging

- Supplied in tape and reel packaging, 900 per reel

Part Number	Inductance μH (rated)	OCL ⁽¹⁾ μH±20%	I _{RMS} ⁽²⁾ Amperes	I _{SAT} ⁽³⁾ Amperes	DCR ⁽⁴⁾ mΩ typ.	Volts ⁽⁵⁾ μS (typ)
UP2C-R47-R	0.470	0.48	12.2	18.6	2.5	4.15
UP2C-1R0-R	1.0	1.03	9.80	11.8	3.9	7.0
UP2C-1R5-R	1.5	1.45	8.10	10.0	5.6	8.3
UP2C-2R2-R	2.2	2.00	7.50	8.67	6.6	9.6
UP2C-3R3-R	3.3	3.30	5.90	6.84	10.5	12.1
UP2C-4R7-R	4.7	4.41	5.62	6.20	11.7	13.4
UP2C-6R8-R	6.8	7.16	4.42	4.82	18.0	17.3
UP2C-100-R	10.0	10.56	3.61	3.94	28.3	21.1
UP2C-150-R	15.0	15.97	3.17	3.17	36.9	26.2
UP2C-220-R	22.0	22.33	2.61	2.65	54.0	31.3
UP2C-330-R	33.0	32.11	2.16	2.20	79.7	37.7
UP2C-470-R	47.0	47.90	1.77	1.83	118.5	45.4
UP2C-680-R	68.0	65.03	1.57	1.53	151.7	54.3
UP2C-101-R	100.0	97.85	1.26	1.24	233.1	67.1
UP2C-151-R	150.0	141.9	1.04	1.02	351.4	81.2
UP2C-221-R	220.0	207.8	0.82	0.85	545.0	97.8
UP2C-331-R	330.0	318.2	0.67	0.70	824.3	120
UP2C-471-R	470.0	470.8	0.56	0.58	1191.4	144
UP2C-681-R	680.0	689.7	0.46	0.48	1774.2	173
UP2C-102-R	1000.0	1080.0	0.38	0.40	2657.1	209

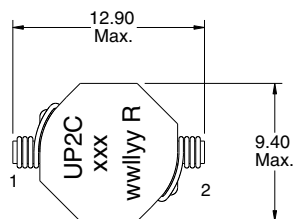
Notes: (1) Open Circuit Inductance Test Parameters: 100KHz, .250Vrms, 0.0Adc.
(2) RMS current for an approximate ΔT of 40°C without core loss, at an ambient temperature of 85°C.
(3) Peak current for approximately 30% rolloff @ 20°C.

(4) DCR limits 20°C.

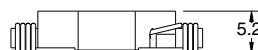
(5) Applied volt-time product (V-uS) across the inductor. This value represents the applied v-us at 300KHz necessary to generate a core loss equal to 10% of the total losses for a 40° temperature rise.

Mechanical Diagrams

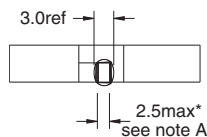
TOP VIEW



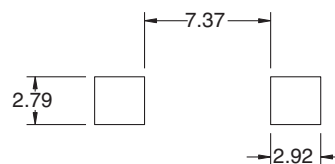
FRONT VIEW



SIDE VIEW

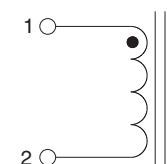


PCB PAD LAYOUT



COMPONENT VIEW

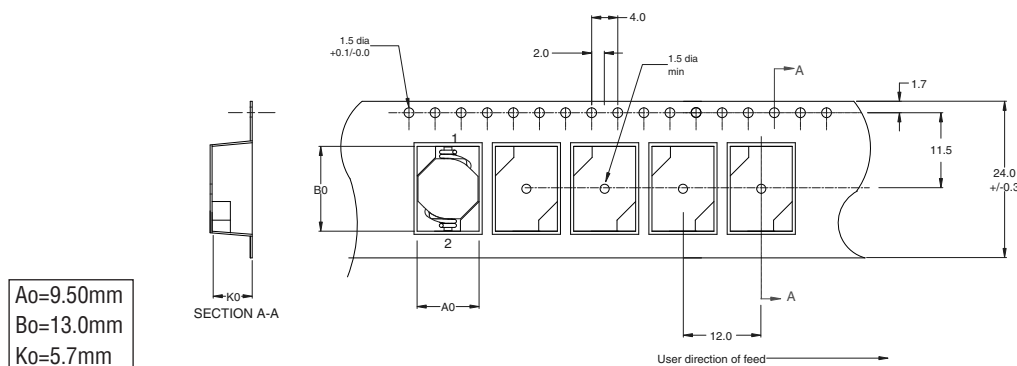
SCHEMATIC



Dimensions in Millimeters.
wwllyy = (date code) R = revision level
xxx = Inductance value per family chart

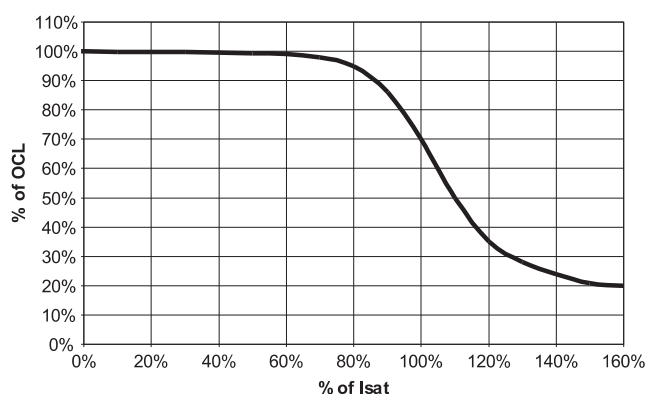
(A) 2.5mm max is width of copper at seating plane. The width above the seating plane may exceed 2.5mm.

Packaging Information



Inductance Characteristics

OCL vs. Isat



Core Loss

IRMS DERATING WITH CORE LOSS

