




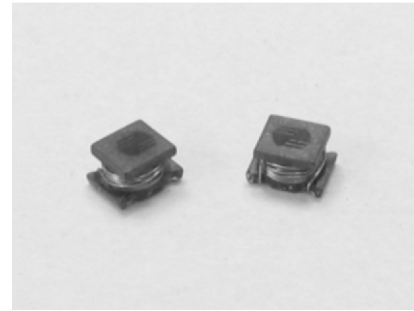





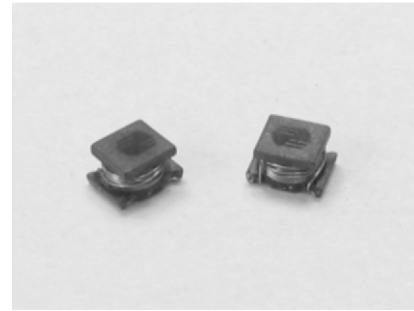


-  Suitable for DC/DC conversions in portable computers, VCR or other communication equipments.
-  High performance and small size with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1 to 2200 micro H
-  RoHS compliant


**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance		Inductance Tolerance (%)			Quality Factor		SRF (MHz)	DCR ( )	Rated dc <sup>4</sup> Current (mA)	Marking (XYYY)		
	Ls (uH)	Test Freq. <sup>2</sup> (Hz)	J	K	M	Q	Test Freq. <sup>3</sup> (Hz)				J	K	M
								Typ.	Typ.				
UISH4NM-1R0F	1.0	1M	N/A	N/A	±20	20	1M	120	0.20	500	N/A	N/A	M1R0
UISH4NM-1R2F	1.2	1M	N/A	N/A	±20	20	1M	100	0.20	500	N/A	N/A	M1R2
UISH4NM-1R5F	1.5	1M	N/A	N/A	±20	20	1M	85	0.30	500	N/A	N/A	M1R5
UISH4NM-1R8F	1.8	1M	N/A	N/A	±20	20	1M	75	0.30	500	N/A	N/A	M1R8
UISH4NM-2R2F	2.2	1M	N/A	N/A	±20	20	1M	62	0.30	500	N/A	N/A	M2R2
UISH4NM-2R7F	2.7	1M	N/A	N/A	±20	20	1M	53	0.32	500	N/A	N/A	M2R7
UISH4NM-3R3F	3.3	1M	N/A	N/A	±20	20	1M	47	0.35	500	N/A	N/A	M3R3
UISH4NM-3R9F	3.9	1M	N/A	N/A	±20	20	1M	41	0.38	500	N/A	N/A	M3R9
UISH4NX-4R7F	4.7	1M	N/A	±10	±20	30	1M	38	0.40	500	N/A	K4R7	M4R7
UISH4NX-5R6F	5.6	1M	N/A	±10	±20	30	1M	33	0.47	500	N/A	K5R6	M5R6
UISH4NX-6R8F	6.8	1M	N/A	±10	±20	30	1M	31	0.50	450	N/A	K6R8	M6R8
UISH4NX-8R2F	8.2	1M	N/A	±10	±20	30	1M	27	0.56	450	N/A	K8R2	M8R2
UISH4NX-100F	10	1M	±5	±10	N/A	35	1M	23	0.56	400	J100	K100	N/A
UISH4NX-120F	12	1M	±5	±10	N/A	35	1M	21	0.62	380	J120	K120	N/A
UISH4NX-150F	15	1M	±5	±10	N/A	35	1M	19	0.73	360	J150	K150	N/A
UISH4NX-180F	18	1M	±5	±10	N/A	35	1M	17	0.82	340	J180	K180	N/A
UISH4NX-220F	22	1M	±5	±10	N/A	35	1M	15	0.94	320	J220	K220	N/A
UISH4NX-270F	27	1M	±5	±10	N/A	35	1M	14	1.1	300	J270	K270	N/A
UISH4NX-330F	33	1M	±5	±10	N/A	35	1M	12	1.2	270	J330	K330	N/A
UISH4NX-390F	39	1M	±5	±10	N/A	35	1M	11	1.4	240	J390	K390	N/A
UISH4NX-470F	47	1M	±5	±10	N/A	35	1M	10	1.5	220	J470	K470	N/A
UISH4NX-560F	56	1M	±5	±10	N/A	35	1M	9.3	1.7	200	J560	K560	N/A
UISH4NX-680F	68	1M	±5	±10	N/A	35	1M	8.4	1.9	180	J680	K680	N/A
UISH4NX-820F	82	1M	±5	±10	N/A	35	1M	7.5	2.2	170	J820	K820	N/A
UISH4NX-101F	100	1M	±5	±10	N/A	40	796k	6.8	2.5	160	J101	K101	N/A

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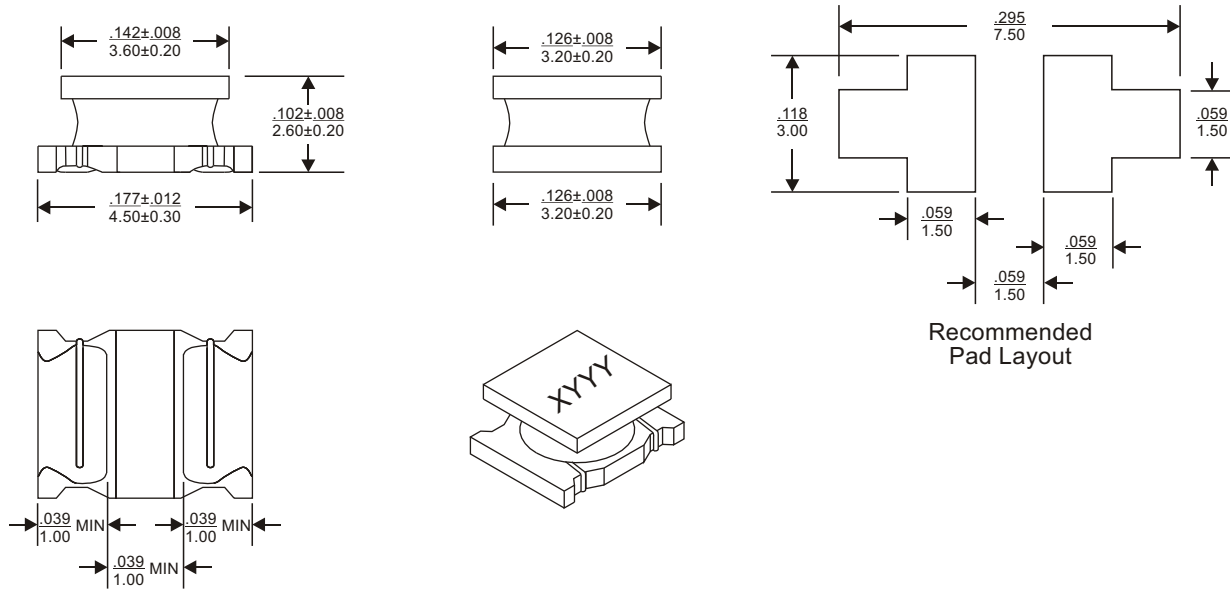
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance		Inductance Tolerance (%)			Quality Factor		SRF (MHz)	DCR ( )	Rated dc <sup>4</sup> Current (mA)	Marking (YYYY)		
	Ls (uH)	Test Freq. (Hz)	J	K	M	Q Typ.	Test Freq. <sup>3</sup> (Hz)				J	K	M
								Typ.	Max				
UISH4NX-121F	120	1M	±5	±10	N/A	40	796k	6.2	3.0	150	J121	K121	N/A
UISH4NX-151F	150	1M	±5	±10	N/A	40	796k	5.5	3.7	130	J151	K151	N/A
UISH4NX-181F	180	1M	±5	±10	N/A	40	796k	5.0	4.5	120	J181	K181	N/A
UISH4NX-221F	220	1M	±5	±10	N/A	40	796k	4.5	5.4	110	J221	K221	N/A
UISH4NX-271F	270	1M	±5	±10	N/A	40	796k	4.0	6.8	100	J271	K271	N/A
UISH4NX-331F	330	1M	±5	±10	N/A	40	796k	3.6	8.2	95	J331	K331	N/A
UISH4NX-391F	390	1M	±5	±10	N/A	40	796k	3.3	9.7	90	J391	K391	N/A
UISH4NX-471F	470	1k	±5	±10	N/A	40	796k	3.0	11.8	80	J471	K471	N/A
UISH4NX-561F	560	1k	±5	±10	N/A	40	796k	2.7	14.5	70	J561	K561	N/A
UISH4NX-681F	680	1k	±5	±10	N/A	40	796k	2.5	17.0	65	J681	K681	N/A
UISH4NX-821F	820	1k	±5	±10	N/A	40	796k	2.2	20.5	60	J821	K821	N/A
UISH4NX-102F	1000	1k	±5	±10	N/A	40	252k	2.0	25.0	50	J102	K102	N/A
UISH4NX-122F	1200	1k	±5	±10	N/A	40	252k	1.8	30.0	45	J122	K122	N/A
UISH4NX-152F	1500	1k	±5	±10	N/A	40	252k	1.6	37.0	40	J152	K152	N/A
UISH4NX-182F	1800	1k	±5	±10	N/A	40	252k	1.5	45.0	35	J182	K182	N/A
UISH4NX-222F	2200	1k	±5	±10	N/A	40	252k	1.3	50.0	30	J222	K222	N/A

**Notes:**

- Ordering Information: UISH4NXa - bbbFc.  
 UISH4NX = Product Type.  
 a = Tolerance of Inductance (J = ±5%; K = ±10%; M = ±20%).  
 bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 152 = 1500uH).  
 F = Internal Control Code.  
 c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Test frequency is specified as the frequency for measuring the Q value.
- Inductance drops by 10% typical at rated DC current.
- Operating temperature range: -40°C to +125°C.
- 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**

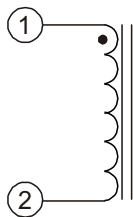


**Notes:**

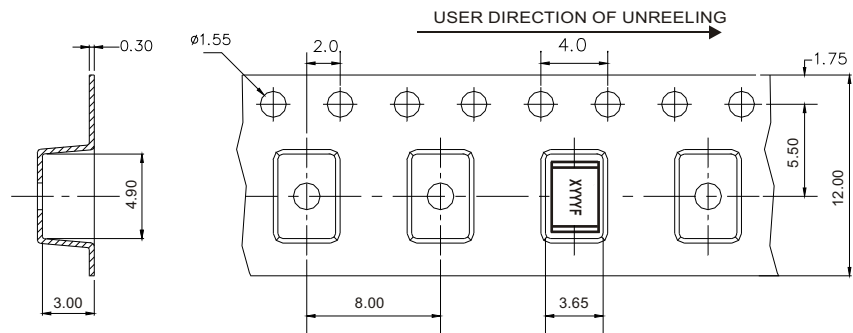
- 7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- 8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.2 typ.
Tape & Reel	: 700 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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