






-  Used in higher speed switch mode
-  Large permissible DC current and low voltage
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated Inductance (uH Typ)	Inductance @0Adc <sup>2</sup>		Heating <sup>3</sup> Current Irms(A)	Isat <sup>4</sup> 15% rolloff (A)	Isat <sup>5</sup> 30% rolloff (A)	DCR (m Ω) Max	Volts μSec (VμS) Typ	Marking (XXXMF)
		(uH)	Tolerances (%)						
RIS1040A-R15MF	0.15	0.175	±20	39.0	43	76	0.80	1.5	R15MF
RIS1040A-R39MF	0.39	0.390	±20	28.3	26	45	1.55	2.5	R39MF
RIS1040A-R75MF	0.75	0.766	±20	18.8	18.5	32.7	3.40	3.5	R75MF
RIS1040A-1R2MF	1.2	1.32	±20	16.0	14.4	25.5	4.70	4.5	1R2MF
RIS1040A-1R9MF	1.9	1.90	±20	12.4	11.8	20.9	7.7	5.5	1R9MF
RIS1040A-2R6MF	2.6	2.65	±20	10.2	10.0	17.7	11.4	6.5	2R6MF
RIS1040A-3R5MF	3.5	3.52	±20	8.50	8.7	15.3	16.5	7.5	3R5MF
RIS1040A-4R5MF	4.5	4.52	±20	8.00	7.7	13.5	18.6	8.5	4R5MF
RIS1040A-5R6MF	5.6	5.65	±20	6.70	6.9	12.1	26.3	9.5	5R6MF
RIS1040A-6R9MF	6.9	6.90	±20	6.40	6.2	10.9	28.9	10.5	6R9MF
RIS1040A-8R2MF	8.2	8.27	±20	5.50	5.7	10.0	39.6	11.5	8R2MF
RIS1040A-100MF	10.0	9.77	±20	5.20	5.2	9.2	43.6	12.5	100MF
RIS1040A-150MF	15.0	15.02	±20	4.10	4.2	7.4	68.6	15.5	150MF
RIS1040A-220MF	22.0	21.40	±20	3.40	3.5	6.2	99.5	18.6	220MF
RIS1040A-330MF	33.0	31.65	±20	2.70	2.9	5.1	154	22.6	330MF
RIS1040A-470MF	47.0	47.28	±20	2.20	2.4	4.2	237	27.6	470MF

**Notes:**

1. Ordering Information: RIS1040A - bbbaFc.

RIS1040A = Product Type.

a = Tolerance of Inductance (M = ± 20%).

bbb = Rated inductance value in uH (i.e. 1R5 = 0.15uH; 1R2 = 1.2uH; 220 = 22.0 uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.1Vrms, 100kHz.

3. 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.

4. Saturation current, Isat, indicates the value of DC current when the inductance is 15% (typical) lower than its initial value at an ambient temperature of 25°C.

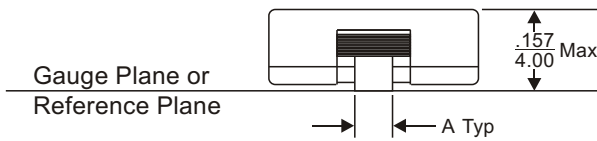
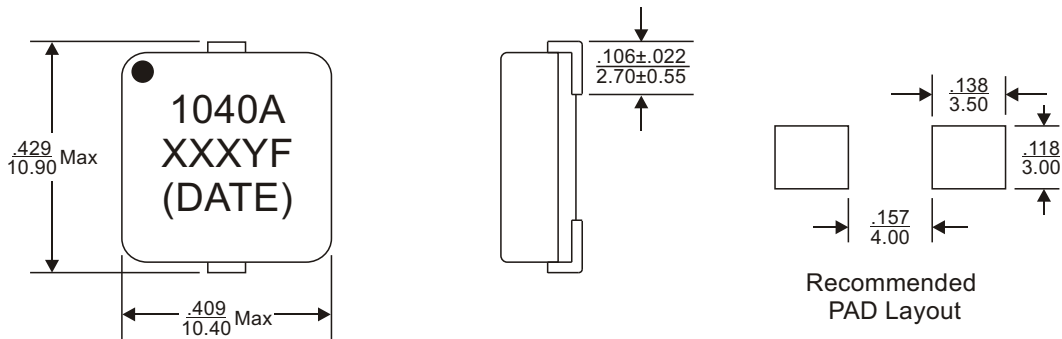
5. Saturation current, Isat, indicates the value of DC current when the inductance is 30% (typical) lower than its initial value at an ambient temperature of 25°C.

6. Operating temperature range: -40°C to +125°C.

7. 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**



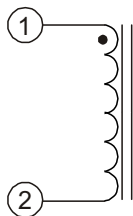
E&E Part Number	A Typ (in./mm)
RIS1040A-R15MF	.083/2.10
RIS1040A-R39MF	.083/2.10
RIS1040A-R75MF	.083/2.10
RIS1040A-1R2MF	.083/2.10
RIS1040A-1R9MF	.083/2.10
Through RIS1040A-470MF	.106/2.70

**Notes:**

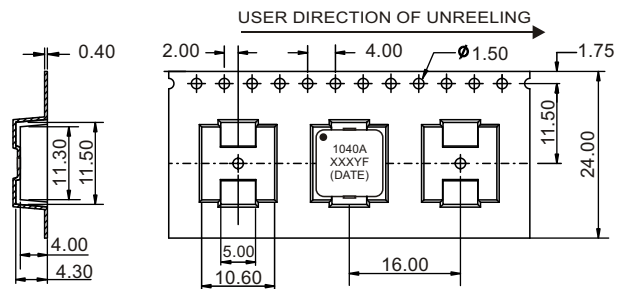
- 8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- 9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 2.4 typ.
Tape & Reel	: 800 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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