Figure 1.The Physical Photo of ATIN−0740 Series

FEATURES

- Shielded construction
- Frequency range up to 1.0 MHz
- Lowest DCR/uH in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise due to composite construction
- Compliant to RoHS Directive 2002/95/EC

PART #NAMING

AT	IN	0740	−	3R3	M
A	B	C		D	E

A: Company Code, Analog Technologies, Inc.

B: Inductor

C: Dimensions

D: Inductance, e.g. 3R3=3.3uH.

E: Inductance Tolerance, e.g. M = ±20%.

ELECTRICAL CHARACTERISTICS

Test Conditions: 25°C, 100 KHz, 0.1V

PART #	L (0A) (uH±20%)	Irms (A)	Isat (A)	DCR Typ (mΩ)	DCR Max (mΩ)	DCR/L (mΩ/ uH)
ATIN0740−R22M	0.22	30.0	34.0	1.1	1.3	5.00
ATIN0740−R50M	0.5	20.0	21.0	2.8	3.4	5.60
ATIN0740−1R1M	1.1	15.3	19.0	4.6	5.5	4.18
ATIN0740−1R5M	1.5	11.5	13.0	8.0	10.0	5.33
ATIN0740−2R2M	2.2	11.0	11.0	9.8	12.0	4.45
ATIN0740−3R3M	3.3	10.0	10.0	12.5	16.0	3.79
ATIN0740−4R7M	4.7	6.7	8.0	18.4	24.0	3.91
ATIN0740−5R6M	5.6	6.3	8.0	21.0	29.0	3.75

PART #	L (0A) (uH±20%)	Irms (A)	Isat (A)	DCR Typ (mΩ)	DCR Max (mΩ)	DCR/L (mΩ/ uH)
ATIN0740−6R8M	6.8	6.0	7.0	29.0	33.0	4.26
ATIN0740−8R2M	8.2	5.0	5.5	34.0	39.0	4.15
ATIN0740−100M	10.0	4.1	5.0	42.5	45.0	4.25
ATIN0740−120M	12.0	4.0	5.0	46.3	53.0	3.86
ATIN0740−150M	15.0	3.6	4.3	57.3	60.0	3.82

NOTE:

1. All test data is in reference to 25°C ambient temperature.
2. Irms will cause an approximate ΔT of 40°C.
3. Isat will cause the inductance value to drop approximately 20%.
4. Operating Temperature Range,−55°C ~ +125°C.
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worse case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature.

MECHANICAL DIMENSION

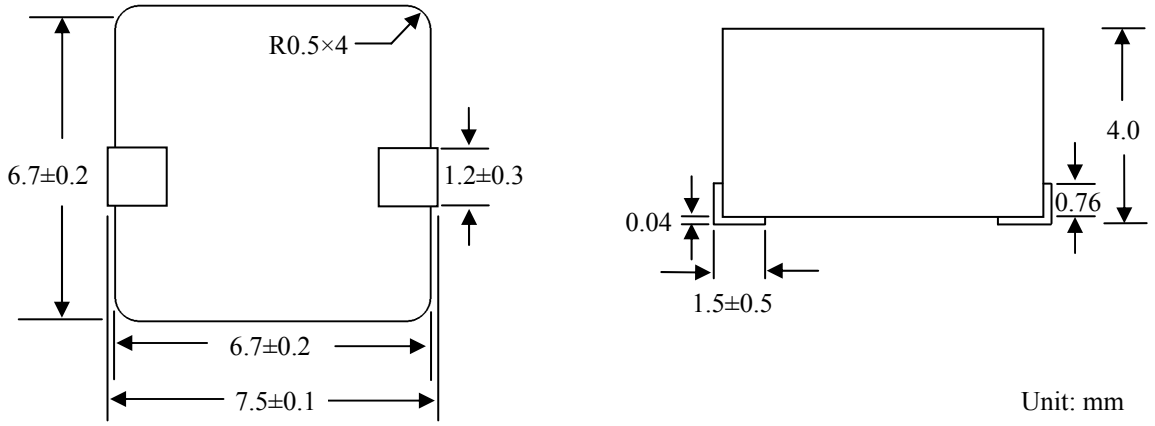

Figure 2. Mechanical Dimensions for ATIN−0740 Series Inductors

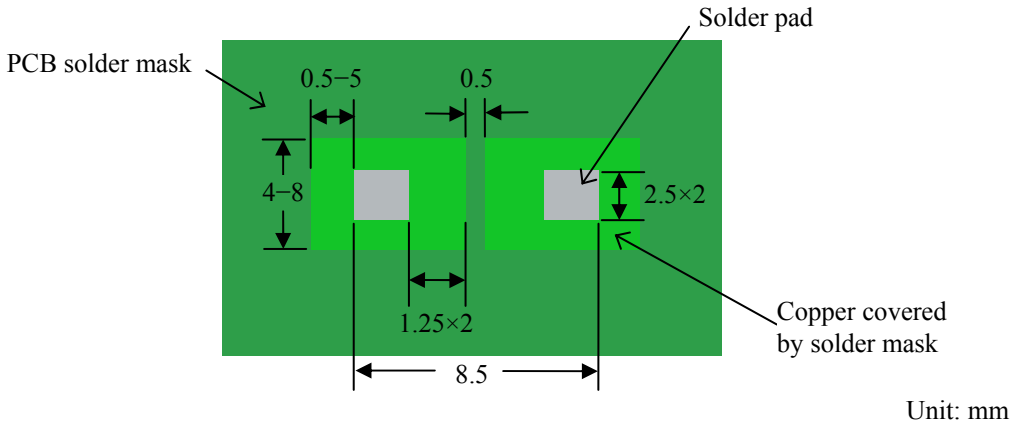

Figure 3. Recommended Footprint

ORDERING INFORMATION

The lead time is 6~8 weeks. Please contact us for more ordering information.

Table 3. Unit Price

Part #	1 − 24	25 − 99	100 − 249	250 − 999	≥ 1000
ATIN−0740 Series	$1.30	$1.10	$0.90	$0.70	$0.55

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