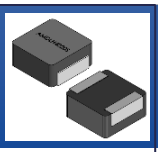
Molded Inductor (Metal Alloy)



AMDLH5030S

Request Samples | Check Inventory

5.6 x 5.2 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Shielded construction
- Soft saturation
- Low DCR, High Efficiency
- Designed for switching frequencies between 100KHz-2MHz

Applications

- DC/DC Switching converters
- Power supplies for Notebooks, workstations, and Servers
- Low Profile applications
- High current, transient load applications

Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance		Saturation Current	Temperature Rise Current
	0.1MHz/1.0V		Max.	Typ.	Typ.	Typ.
Units	µH	%	mΩ		A	A
Symbol	L	M	DCR		Isat	Irms
AMDLH5030S-R47M	0.47	±20	3.7	3.1	14.0	18.0
AMDLH5030S-R68M	0.68	±20	4.3	3.7	11.5	15.0
AMDLH5030S-1R0M	1.00	±20	6.7	5.6	11.0	14.0
AMDLH5030S-1R5M	1.50	±20	10.0	8.3	10.5	13.0
AMDLH5030S-2R2M	2.20	±20	14.4	12.0	8.5	10.5
AMDLH5030S-3R3M	3.30	±20	19.2	16.0	7.5	8.5
AMDLH5030S-4R7M	4.70	±20	31.2	26.0	6.5	7.0
AMDLH5030S-5R6M	5.60	±20	39.6	33.0	6.1	6.5
AMDLH5030S-6R8M	6.80	±20	43.2	36.0	5.9	6.3
AMDLH5030S-8R2M	8.20	±20	55.2	46.0	5.5	5.8
AMDLH5030S-100M	10.00	±20	69.6	58.0	5.0	5.2
AMDLH5030S-150M	15.00	±20	108.0	90.0	2.6	4.1
AMDLH5030S-220M	22.00	±20	133.2	111.0	2.2	3.6

Test Conditions

Isat: DC current at which the inductance drops 30% from its initial value.

Irms: DC current that causes the temperature rise (ΔT, approximate 40˚C) from 25°C ambient.

Operating Temperature: -40˚C ~ +125˚C (including self-temperature rise)

Storage Condition: -40˚C ~ +125˚C (on board), -10˚C ~ +40˚C (with packaging) and R.H. 85% max.

Operating Voltage: 50V (across inductor)

AMDLH5030S Series is RoHS Compliant and Pb free.

For saturation and temperature rise graphs, please visit Abracon | Power Inductor Performance Analyzer (PIPA)

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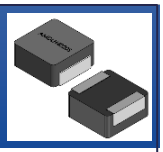

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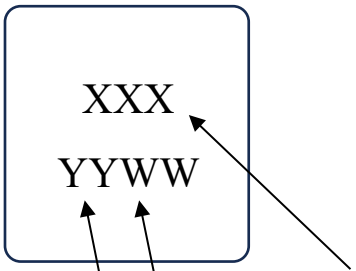
RoHS/RoHS II Compliant
MSL Level = 1

Part Identification

AMDLH5030S - □□□

Inductance Code	Tolerance	Packaging
See Electrical Specification table	M = ± 20%	T: Tape and Reel (See Packaging) Blank: Bulk

Marking



Inductance Code

e.g. 2R2

W: Week: E.g. 05 for the 5th week of the year.

Y: Year: E.g. 24 for 2024

Marking Method = Ink Marking

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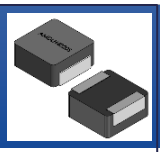

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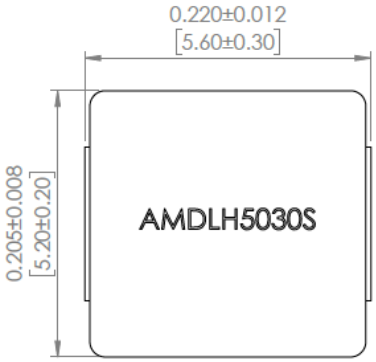
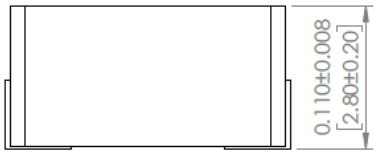
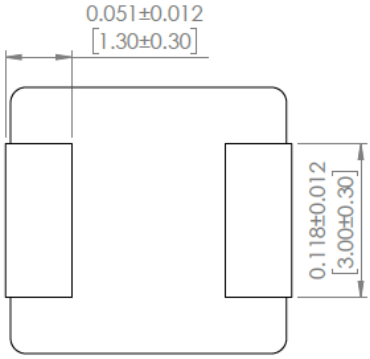
Mechanical Specifications



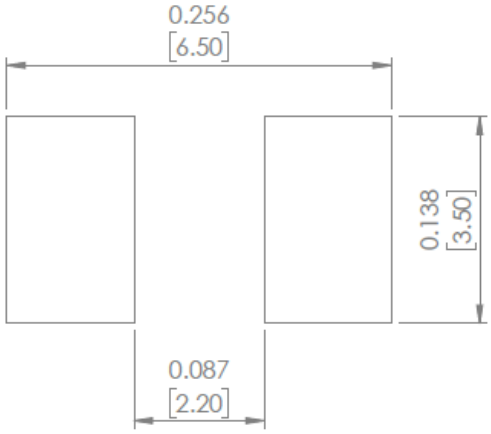
TOP VIEW



FRONT VIEW



BOTTOM VIEW



RECOMMENDED LAND PATTERN

Dimensions: Inches [mm]

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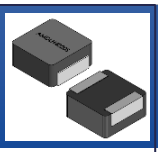

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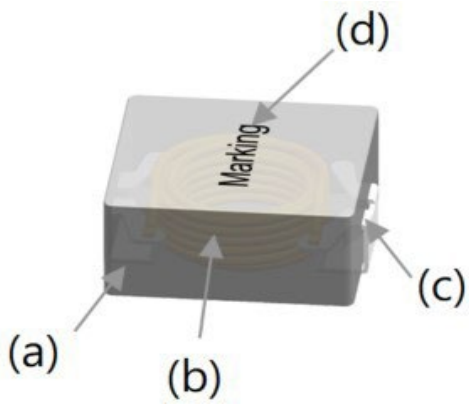
Materials



	Components	Material
a	Core	Alloy Powder
b	Wire	Polyester Wire
c	Electrode	Cu/Ni/Sn
d	Marking	Ink

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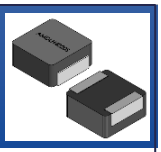

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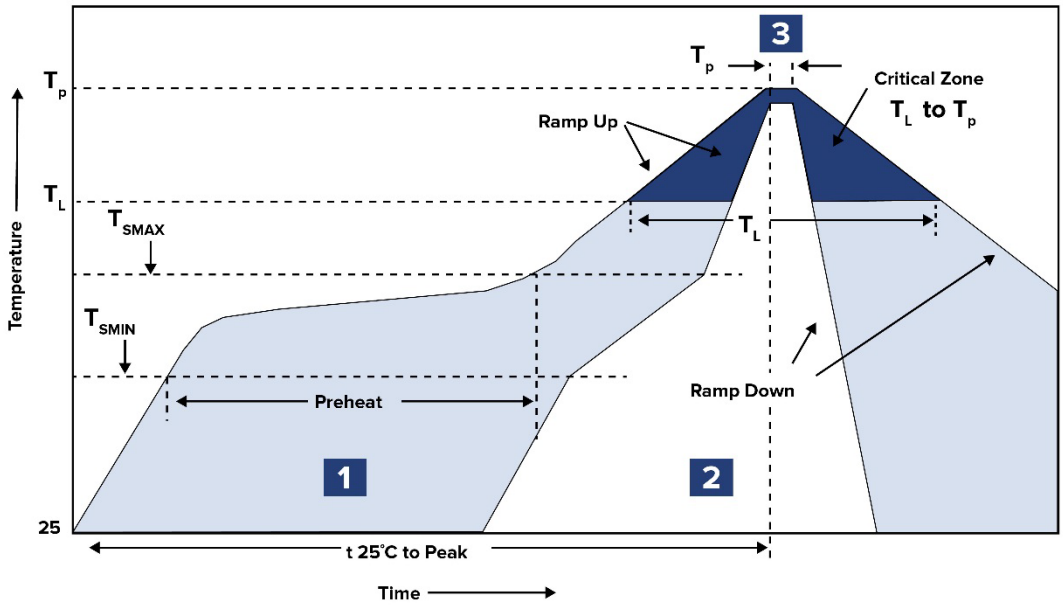
Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	T_L ≥217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C	30 sec. MAX

Time of 25°C to peak temperature: 8 mins Max
Ramp up rate: 3°C/Second max.
Ramp down rate: 6°C/Second max.

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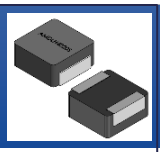

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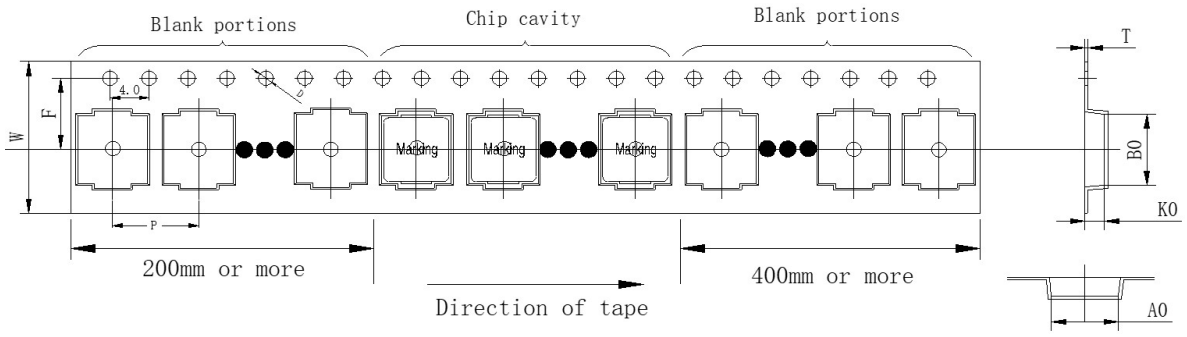
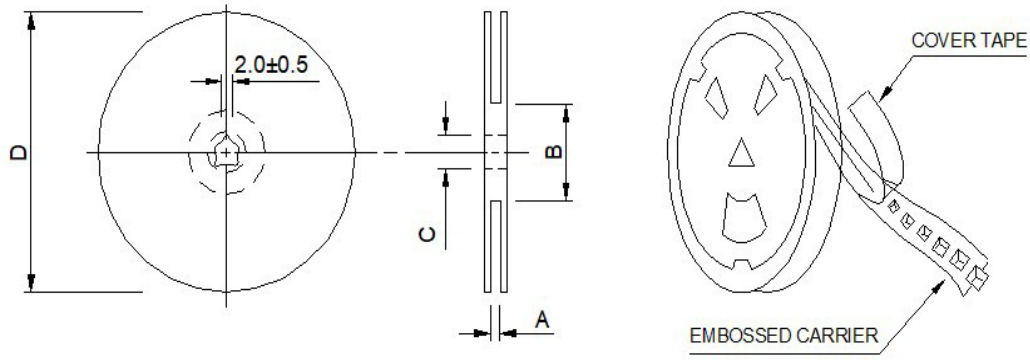
MSL Level = 1

Packaging

Tape & Reel: 2000 pcs/reel



A0	B0	W	F	P	D	K0	T
5.70±0.10	6.50±0.10	12.00±0.3	5.5±0.1	8.00±0.10	1.5±0.1	3.30±0.10	0.35±0.05



Type	A	B	C	D
13” x 12mm	12.4+2.0/-0.0	100.0±2.0	13.0+0.5/-0.2	330.0±0.3

Dimensions: mm

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