

AMDLH5030S

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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.	Тур.	Тур.	Typ.
Units	μН	%	ms	Ω	A	A
Symbol	L	M	DC	CR	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: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (including self-temperature rise)

Storage Condition: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (on board), $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ (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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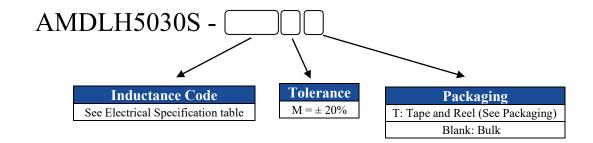


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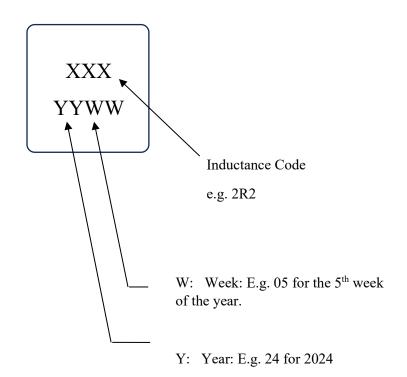


5.6 x 5.2 x 2.8 mm **RoHS/RoHS II Compliant** MSL Level = 1

Part Identification



Marking



Marking Method = Ink Marking



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REVISION Initial Release: 2/28/2024

ABRACON IS ISO9001-2015 CERTIFIED



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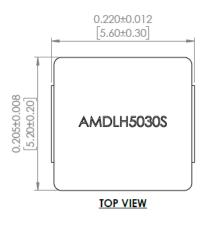


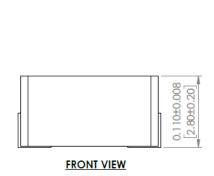
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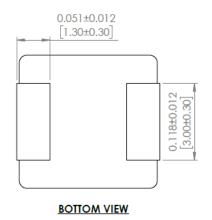


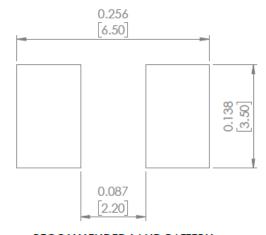
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Mechanical Specifications









RECOMMENDED LAND PATTERN

Dimensions: Inches [mm]



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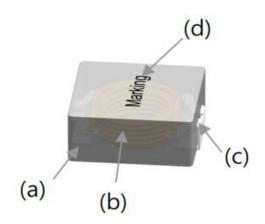


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Materials



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





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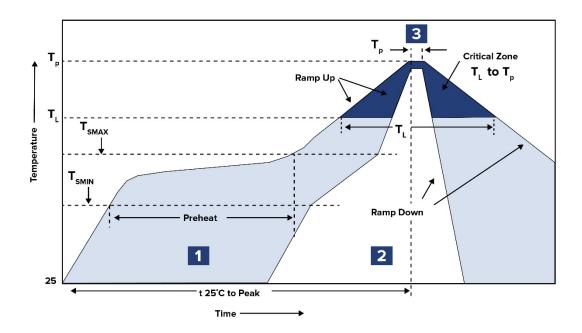


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 200^{\circ}C$	$60 \sim 120 \text{ sec.}$
2	Reflow	T _L ≥217°C	$60 \sim 150 \text{ sec.}$
3	Peak heat	Т _Р 260°С	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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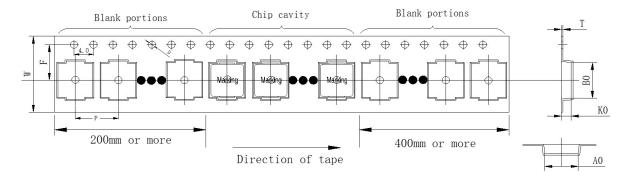
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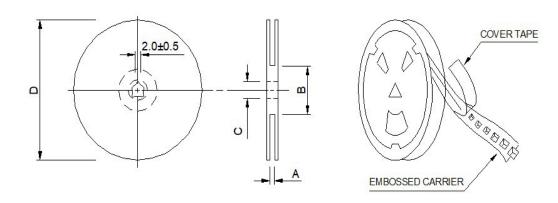
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Packaging

Tape & Reel: 2000 pcs/reel



A0	В0	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



I	Type	A	В	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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