

# Molded SMD Power Inductor



**AMSLA-1070**

Request Samples



Check Inventory



**10.4 x 8.0 x 7.0 mm**  
**RoHS/RoHS II Compliant**  
MSL Level = 1

## Features

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

## Applications

- Desktop/ Server applications
- High current point-of-load (POL) converters
- Lighting
- Solar inverters and power
- Industrial and robotics
- Medium and high-power switch mode power supplies.

## Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance	Saturation Current	Temperature Rise Current	Package Height
	0.1MHz/1V		Max	Max	Max	
Units	nH	%	mΩ	A	A	mm
Symbol	L	J, K, M	DCR	Isat	Irms	C
AMSLA-1070-150N	150	20	0.41	70	70	7.0 Max
AMSLA-1070-170N	170	15	0.29	60	61	7.3±0.3
AMSLA-1070-215N	215	10	0.29	44	61	7.3±0.3
AMSLA-1070-310N	310	20	0.48	32	51	7.0 Max

## Test Conditions

**Isat:** DC current at which the inductance drops 20% (30% for 170N and 215N) from its value without current.

**Irms:** DC current that causes the temperature rise ( $\Delta T$ , approximate 40 °C) from 20°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. 60 max

**Operating Voltage:** 40V (across inductor)

**AMSLA-1070 Series is RoHS Compliant and Pb free**

**AMSLA-1070 is commercial grade.**

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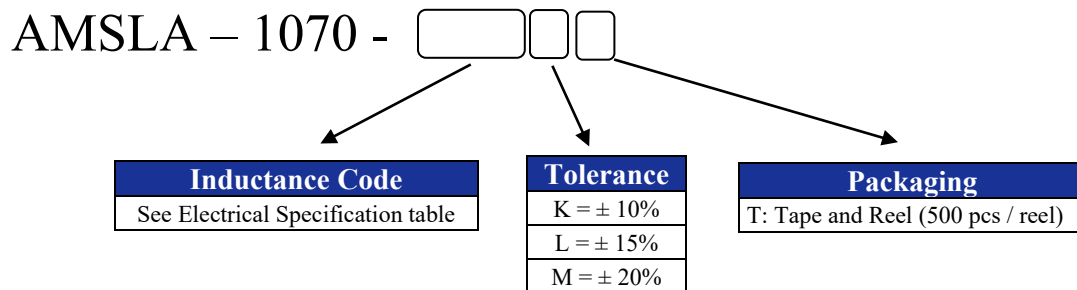


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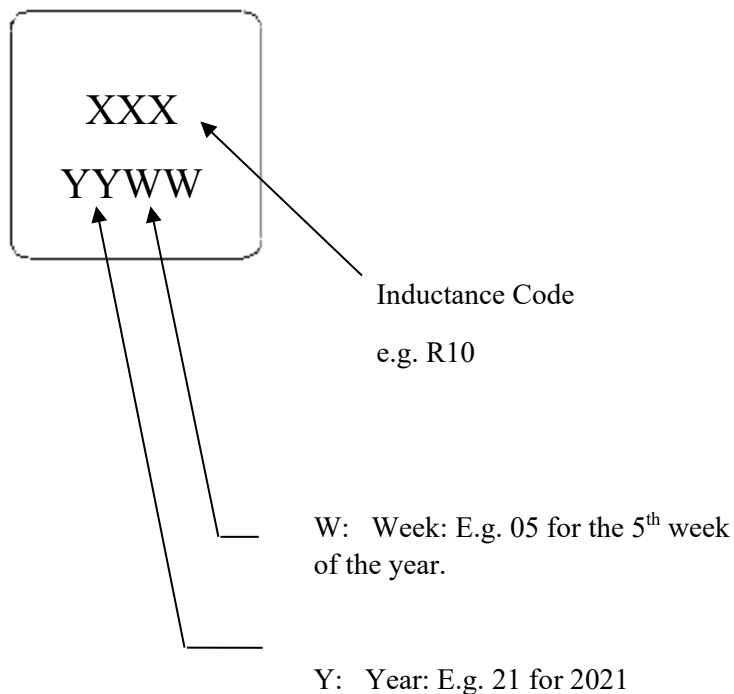


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## Part Number Identification



## Marking



**Marking Method = Ink Marking**

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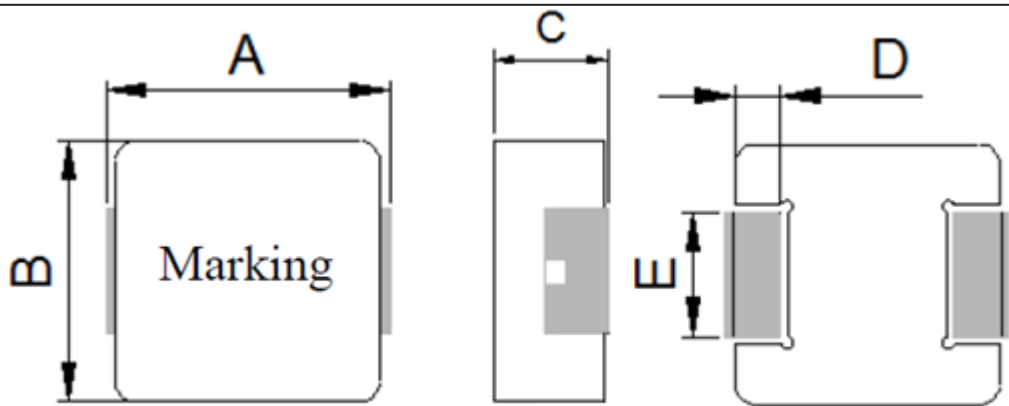


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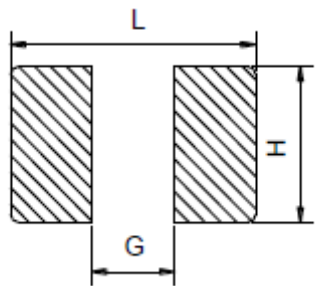


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## Mechanical Dimensions



Series	A	B	C	D	E
AMSLA-1070	10.4 Max	8.0 Max	See Electrical Specifications table	$2.54 \pm 0.3$	$2.3 \pm 0.2$



L	G	H
10.90 Ref.	4.32 Ref.	2.79 Ref.

Dimensions: mm

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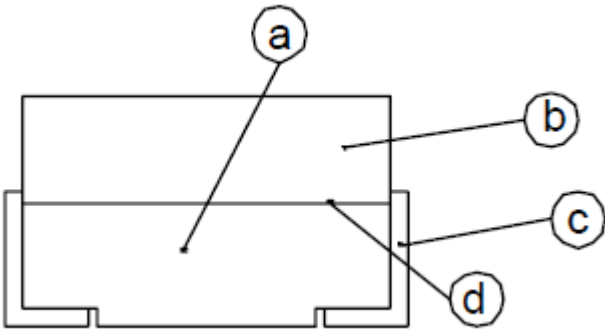


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## Materials



	Components	Material
a	Core	Manganese-Zinc Ferrite
b	Core	Manganese-Zinc Ferrite
c	Electrode	Nickel-Tin
d	Adhesive (Top)	KAA11700xx (Black)
e	Adhesive (Bottom)	6030H (Black)

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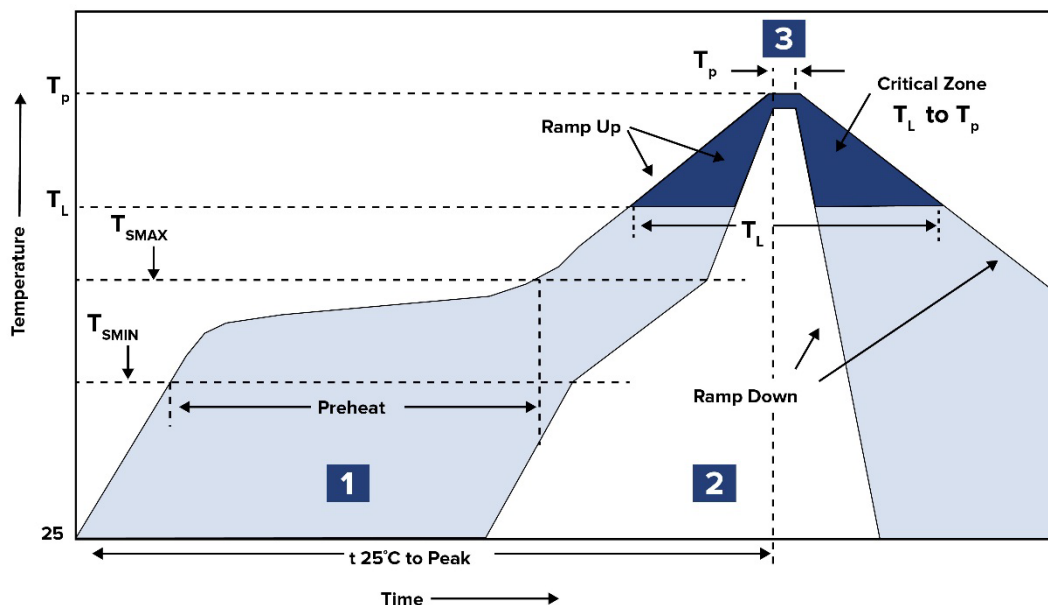


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## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ $150^\circ\text{C} \sim 200^\circ\text{C}$	60 ~ 120 sec.
2	Reflow	$T_L$ $217^\circ\text{C}$	60 ~ 150 sec.
3	Peak heat	$T_P$ $260^\circ\text{C}$	10 sec. MAX

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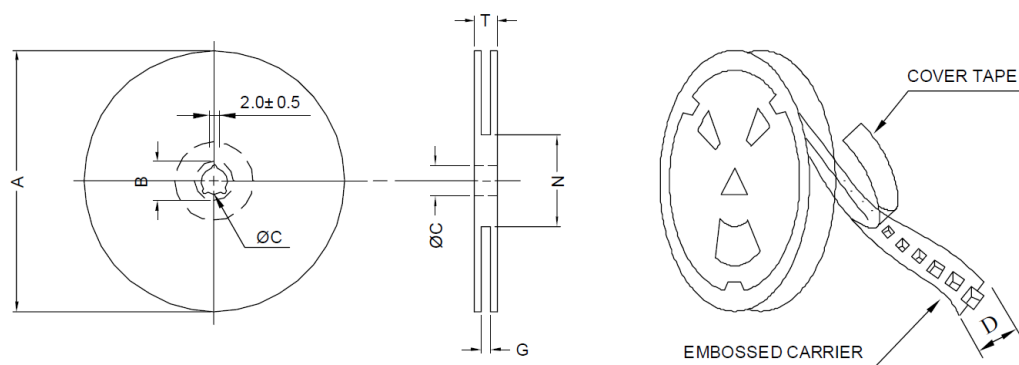
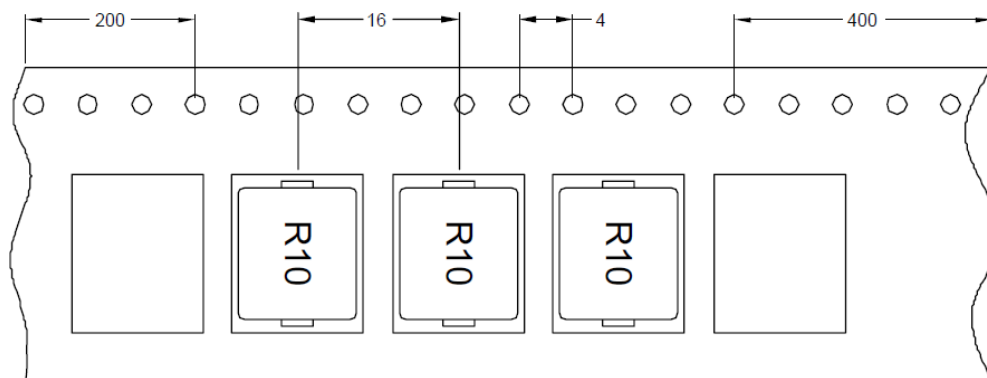
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## Packaging

**Tape & Reel: 500 pcs/reel**



A	B	C	D	G	N	T
330	21±0.8	13.0±0.5	24.0	26.0	50.0	30.4

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