

# Automotive Stacked Inductor



AMSLA-Q7050

Request Samples



Check Inventory



7.0 x 7.0 x 5.0 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Features

- AEC-Q200 Qualified
- 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
	0.1MHz/1V		Max	Max	Max
Units	nH	%	mΩ	A	A
Symbol	L	M	DCR	Isat	Irms
AMSLA-Q7050-R07	72	20	0.35	58	45
AMSLA-Q7050-R10	105	20	0.35	46	45
AMSLA-Q7050-R15	150	20	0.35	30	45

## Test Conditions

**Isat:** DC current at which the inductance drops 20% 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-Q7050 is **RoHS Compliant and Pb free.**

AMSLA-Q7050 is **AEC-Q200 Qualified.**

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## Part Number Identification

AMSLA – Q7050 – [ ] [ ] – [ ]

**Inductance Code**

See Electrical Specification table

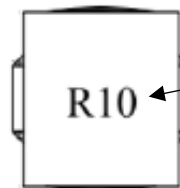
**Tolerance**

M = ± 20%

**Packaging**

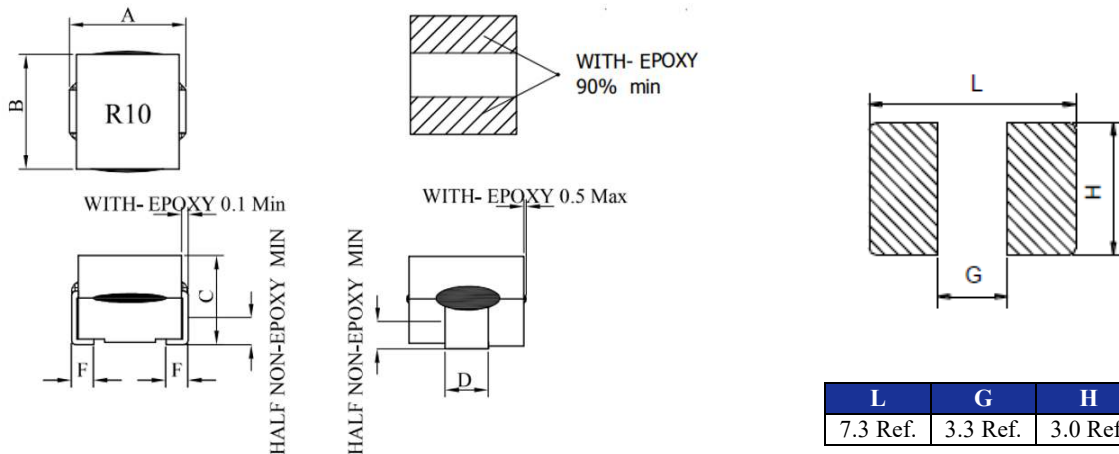
T: Tape and Reel (1000 pcs / reel)

## Marking



Inductance Code

## Mechanical Specifications



A	B	C	D	F
7.0 MAX	7.0 MAX	5.0 MAX	2.5 ± 0.3	1.3 ± 0.2

Dimensions: mm



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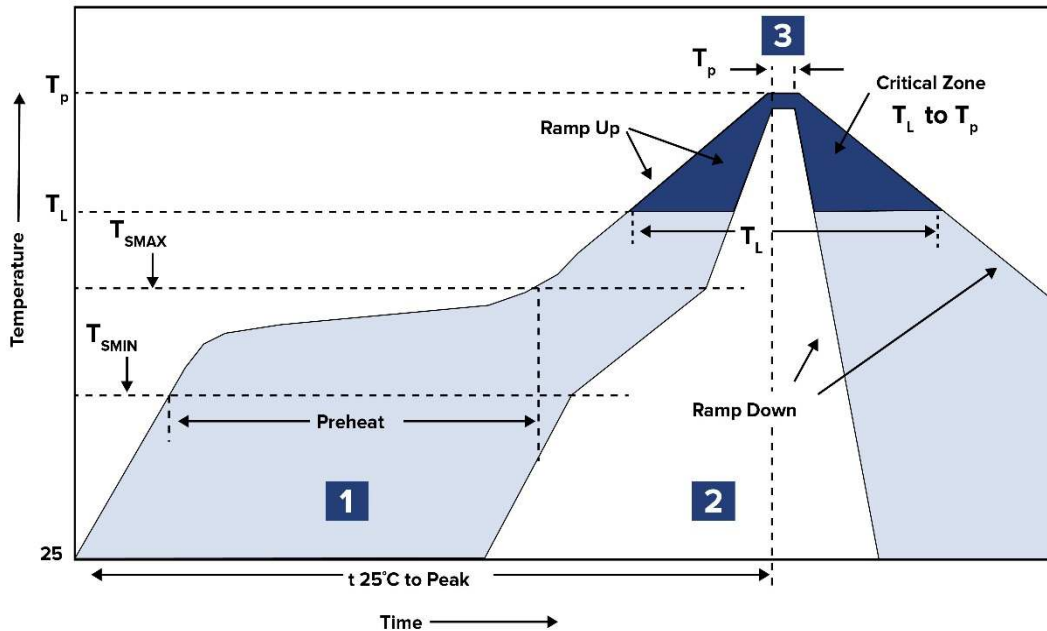


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## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	$T_L$ 217°C	60 ~ 150 sec.
3	Peak heat	$T_P$ 245°C	10 sec. MAX

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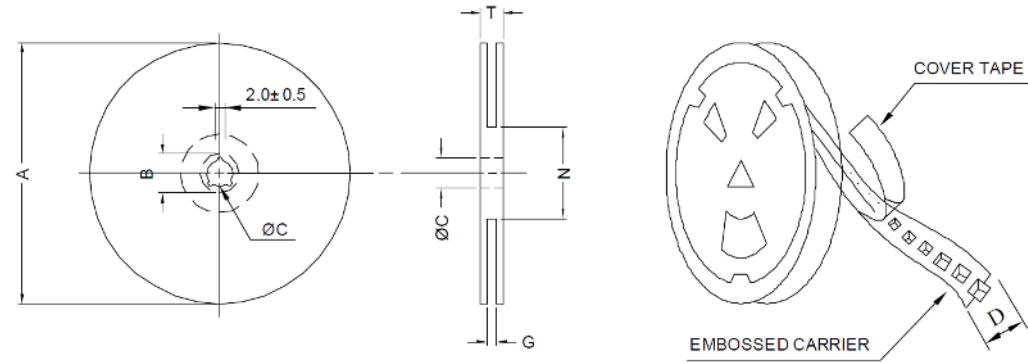
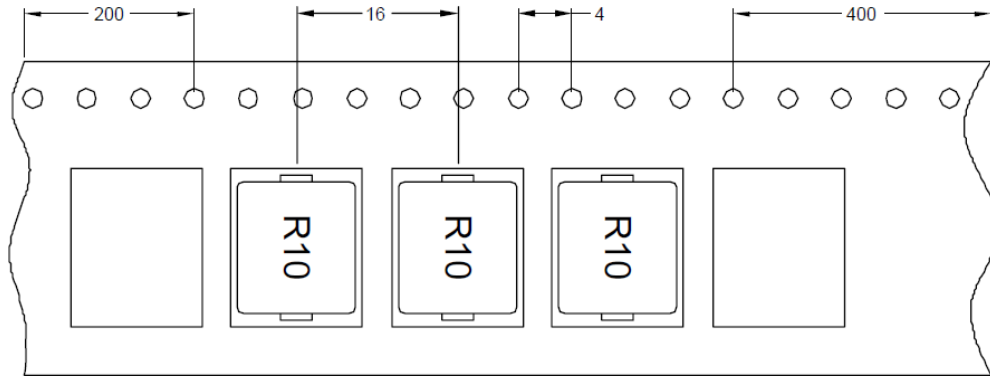
Check Inventory



**7.0 x 7.0 x 5.0 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Packaging

**Tape & Reel: 1000 pcs/reel**



A	B	C	D	G	N	T
330	21 ±0.8	13.0±0.5	16.0	18.0 Max	50.0 Min	22.4

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