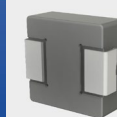


Molded SMD Power Inductor - Extended Temperature



AMXLA-Q6030

Request Samples



Check Inventory



7.1 x 6.6 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- PPAP ready and supported
- TS16949 certified production lines
- AEC-Q200 qualified (-55°C ~ +180°C)
- Shielded construction
- Soft saturation
- Low DCR, High Efficiency

Applications

- Body electronics and comfort system
- Infotainment and entertainment
- Electric vehicles
- 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			Typ.	Max.	Typ.	Max.
Units	μH	%	mΩ	A		A	
Symbol	L	M	DCR	Isat		Irms	
AMXLA-Q6030-R47	0.47	20	4.0	21	18	20	18.0
AMXLA-Q6030-R56	0.56	20	4.8	20	17	19	17.0
AMXLA-Q6030-R68	0.68	20	5.6	19	16.5	17	15.5
AMXLA-Q6030-R82	0.82	20	6.8	18	16	16	14.0
AMXLA-Q6030-1R0	1.00	20	8.0	16	14	15	13.0
AMXLA-Q6030-1R5	1.50	20	13.2	14	12	13	11.0
AMXLA-Q6030-2R2	2.20	20	15.8	13	11	11	9.0
AMXLA-Q6030-3R3	3.30	20	25.8	9.5	8.3	9.0	7.3
AMXLA-Q6030-4R7	4.70	20	37.0	8.5	7.0	7.0	6.0
AMXLA-Q6030-5R6	5.60	20	42.0	7.2	6.0	6.5	5.5
AMXLA-Q6030-6R8	6.80	20	50.0	6.5	5.5	6.0	5.0
AMXLA-Q6030-100	10.0	20	68.0	5.0	4.2	5.0	4.2
AMXLA-Q6030-150	15.0	20	114.0	3.2	2.8	4.1	3.5
AMXLA-Q6030-220	22.0	20	168.0	3.0	2.6	3.4	2.8

*For orderable part numbers, please select the tolerance and packaging option as described in the [Part Identification](#) section.

Test Conditions

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

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 20°C ambient

Operating Temperature: -55°C ~ +180°C (including self-temperature rise)

Storage Condition: -40°C ~ +85°C (on board), -10°C ~ +40°C (with packaging), and R.H. 60 max

Operating Voltage: 40V (across inductor)

AMXLA-Q6030 Series is RoHS Compliant and Pb free

AMXLA-Q6030 is AEC-Q200 qualified (-55°C ~ +180°C)



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MSL Level = 1

Part Number Identification

AMXLA - Q6030 -

Inductance Code

See Electrical Specification table.
E.g. 4R7 for 4.7uH

Tolerance

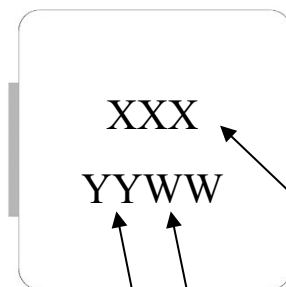
M = $\pm 20\%$

Packaging

T: Tape and Reel (1000 pcs / reel)

Blank: Bulk

Markings



Inductance Code

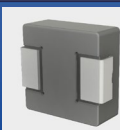
e.g. 6R8

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

Y: Year: E.g. 21 for 2021

Marking Method = Ink Marking

Molded SMD Power Inductor - Extended Temperature



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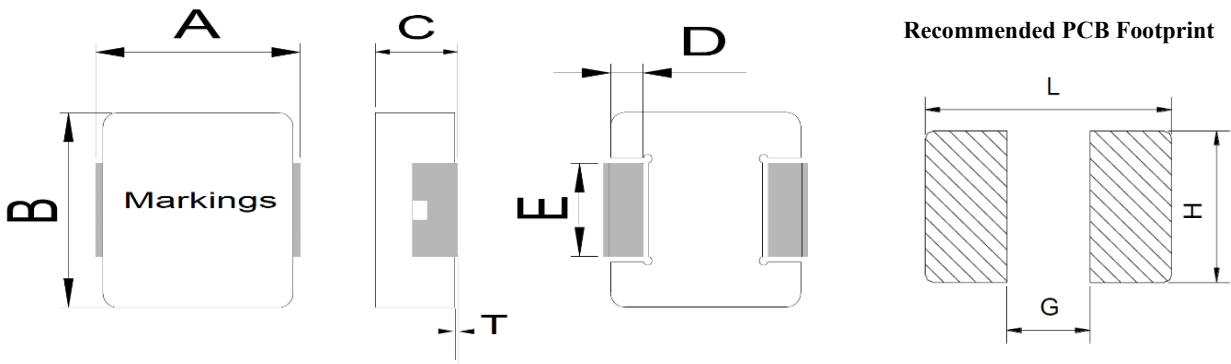


Check Inventory



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MSL Level = 1

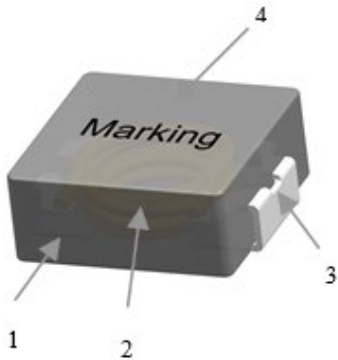
Mechanical Dimensions



Series	A	B	C	D	E	T	L	G	H
AMXLA-Q6030	7.1 ± 0.3	6.6 ± 0.2	2.8 ± 0.2	1.6 ± 0.3	3.0 ± 0.2	0~0.15	8.0 Ref.	3.7 Ref.	3.4 Ref.

Dimensions: mm

Materials



	Components	Material
1	Core	Alloy powder
2	Wire	Polyester-Enameled wire
3	Clip	100% Pb free solder (Ni/Sn plating)
4	Ink	Halogen-free ketone

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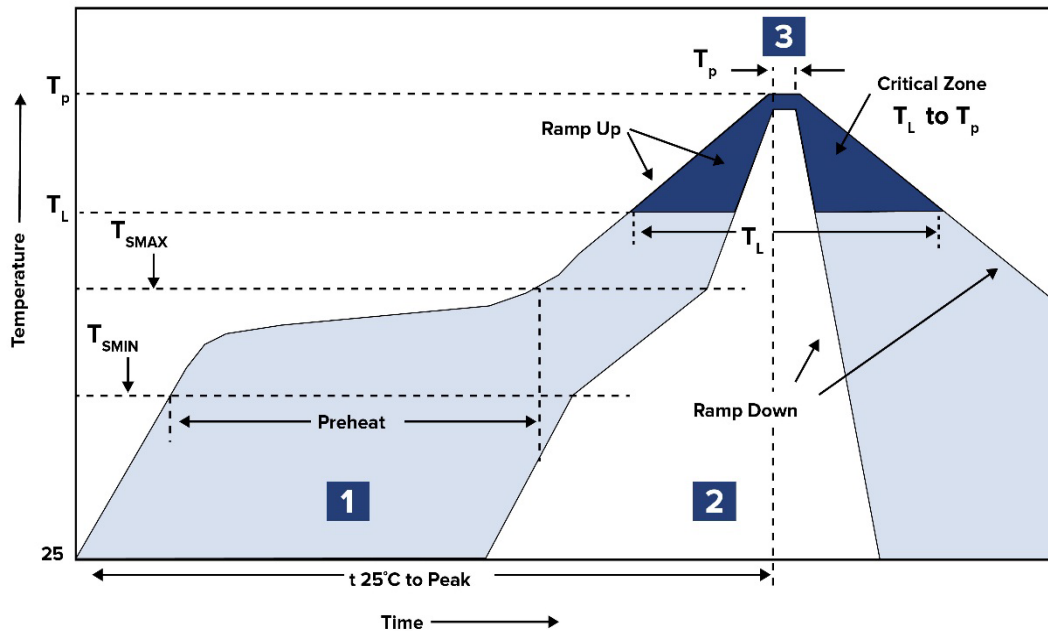


Check Inventory



7.1 x 6.6 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

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 260°C	10 sec. MAX

Molded SMD Power Inductor - Extended Temperature



AMXLA-Q6030

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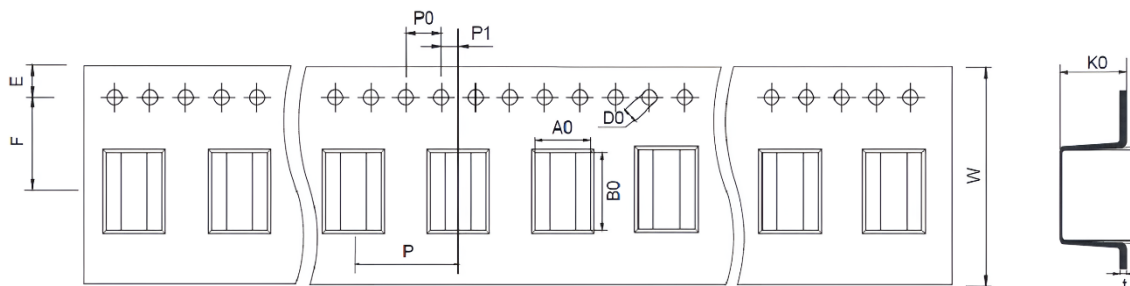
Check Inventory



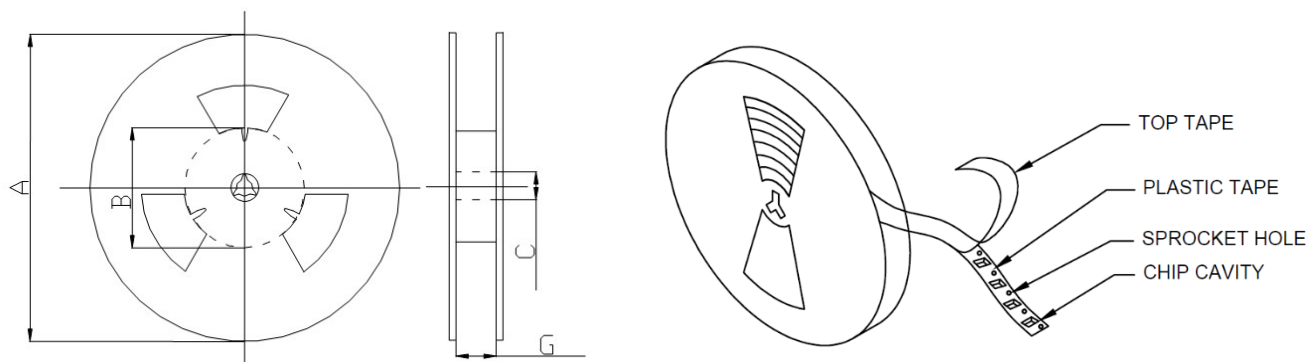
7.1 x 6.6 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 1000 pcs/reel



W	F	P	P0	D0	A0	B0	T	K0
16.0±0.3	7.5±0.1	12.0±0.1	4.0±0.1	1.5±0.1	7.0±0.1	7.7±0.1	0.35±0.05	3.3±0.1



A	B	C	G
330	100±2	13.0+0.5/-0.2	16.4+2/-0

Dimensions: mm

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