

AMXLA-Q6030-R68M-T Datasheet

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DiGi Electronics Part Number	AMXLA-Q6030-R68M-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	AMXLA-Q6030-R68M-T
Description	IND 0.68UH 15.5A 5.6M
Detailed Description	680 nH Shielded Molded Inductor 15.5 A 5.6mOhm Max Nonstandard

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Purchase and inquiry

Manufacturer Product Number:

AMXLA-Q6030-R68M-T

Series:

AMXLA-Q6030

Type:

Molded

Inductance:

680 nH

Current Rating (Amps):

15.5 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

AEC-Q200

Inductance Frequency - Test:

100 kHz

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.118" (3.00mm)

Manufacturer:

Abracon LLC

Product Status:

Active

Material - Core:

Alloy Powder

Tolerance:

±20%

Current - Saturation (Isat):

16.5A

DC Resistance (DCR):

5.6mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-55°C ~ 180°C

Features:

-

Package / Case:

Nonstandard

Size / Dimension:

0.280" L x 0.260" W (7.10mm x 6.60mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



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/0.1V		Max	Max	Max
Units	μH	%	mΩ	A	A
Symbol	L	M	DCR	Isat	Irms
AMXLA-Q6030-R47	0.47	20	4.0	18.0	18.0
AMXLA-Q6030-R56	0.56	20	4.8	17.0	17.0
AMXLA-Q6030-R68	0.68	20	5.6	16.5	15.5
AMXLA-Q6030-R82	0.82	20	6.8	16.0	14.0
AMXLA-Q6030-1R0	1.00	20	8.0	14.0	13.0
AMXLA-Q6030-1R5	1.50	20	13.2	12.0	11.0
AMXLA-Q6030-2R2	2.20	20	15.8	11.0	9.0
AMXLA-Q6030-3R3	3.30	20	25.8	8.3	7.3
AMXLA-Q6030-4R7	4.70	20	37.0	7.0	6.0
AMXLA-Q6030-5R6	5.60	20	42.0	6.0	5.5
AMXLA-Q6030-6R8	6.80	20	50.0	5.5	5.0
AMXLA-Q6030-100	10.0	20	68.0	4.2	4.2
AMXLA-Q6030-150	15.0	20	114.0	2.8	3.5
AMXLA-Q6030-220	22.0	20	168.0	2.6	2.8

Test Conditions

Isat: DC current at which the inductance drops 30% from its value without current.

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)



AMXLA-Q6030

Request Samples

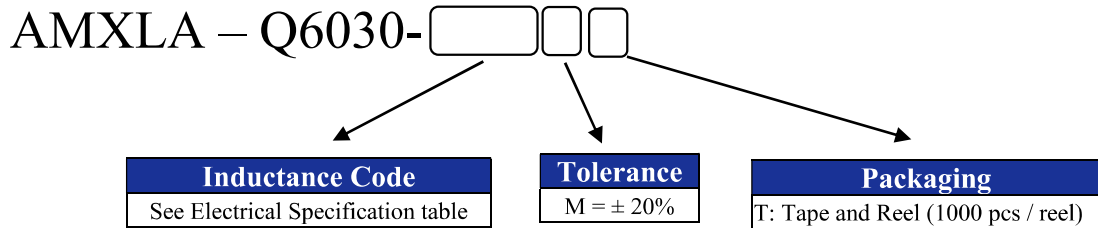


Check Inventory

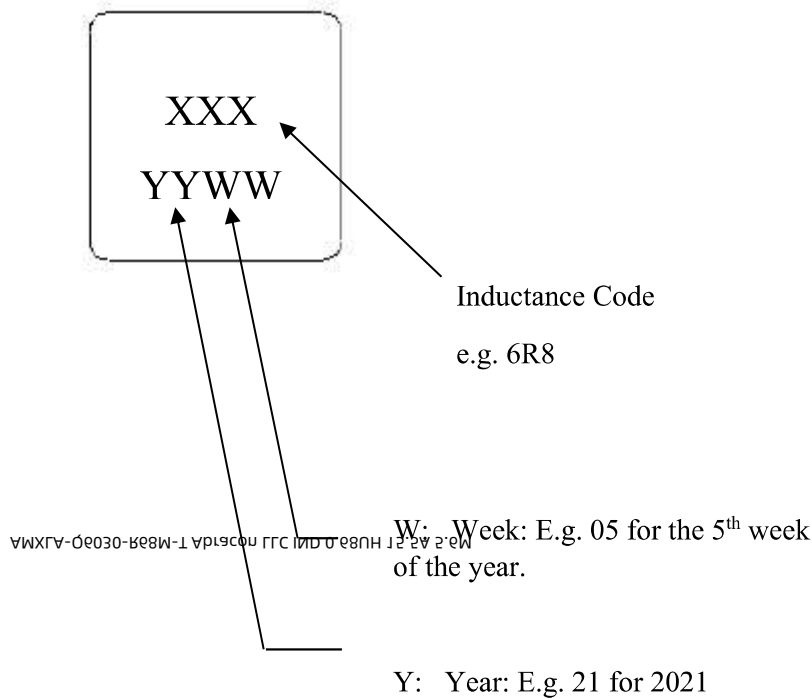


7.1 x 6.6 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Part Number Identification



Marking



Marking Method = Ink Marking



AMXLA-Q6030

Request Samples

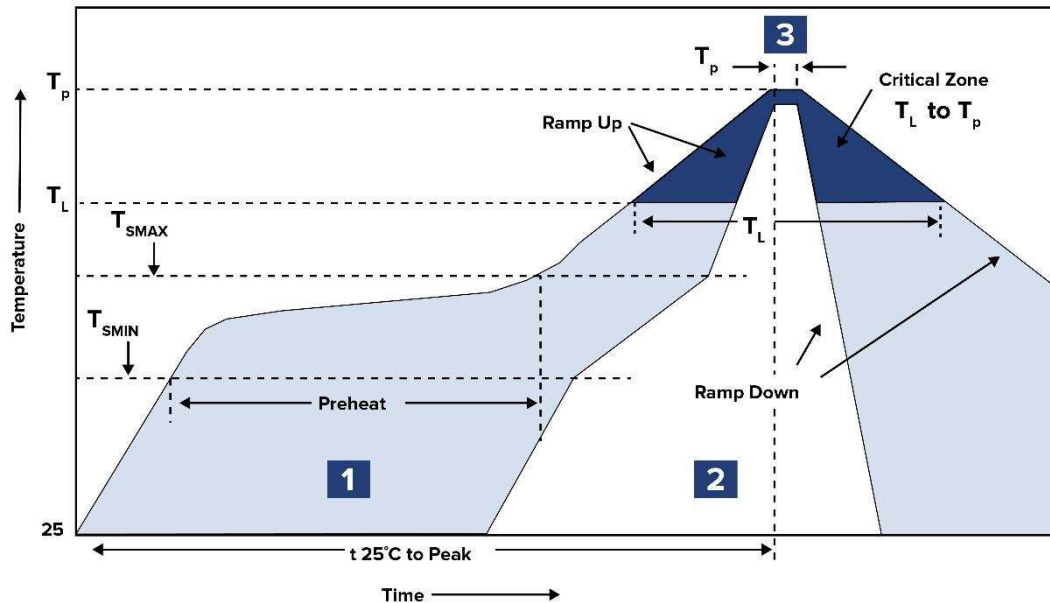


Check Inventory



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

MA.2.A2.T HUB8.0.DM CJL HOC61DA T-M888-0300Q-ALXMA

Molded SMD Power Inductor

Extended Temperature



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Request Samples



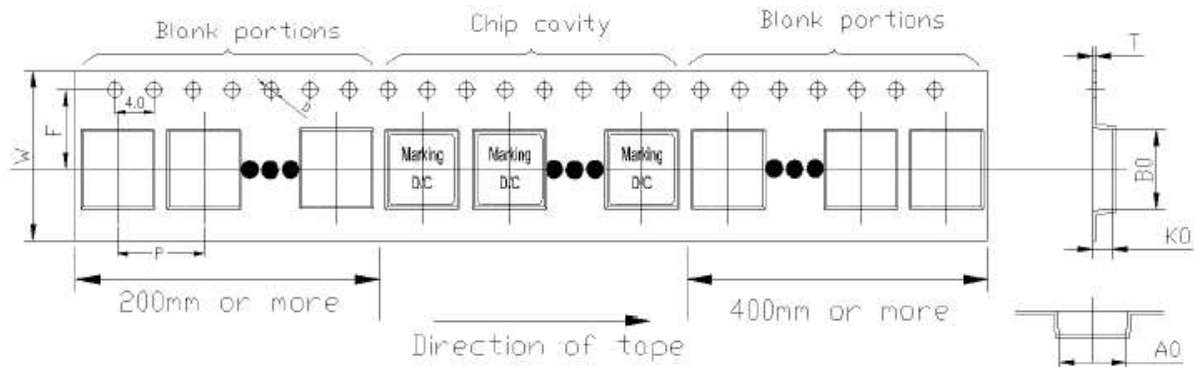
Check Inventory



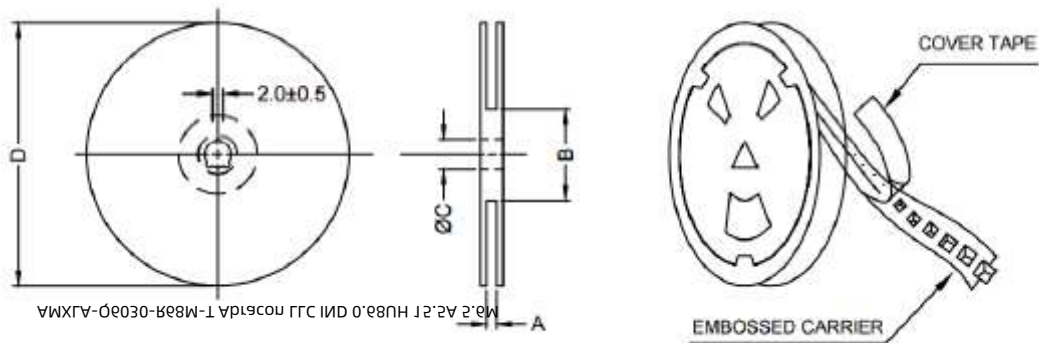
7.1 x 6.6 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 1000 pcs/reel



W	F	P	D	A ₀	B ₀	T	K ₀
16.0±0.3	7.5±0.1	12.0±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	D
16.4+2/-0	100 ± 2	13.0+0.5/-0.2	330

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1.0 Note

- i) The parts are manufactured in accordance with this specification. If other conditions and specifications which are required for this specification, please contact ABRACON for more information.
- ii) ABRACON will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.
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