



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)



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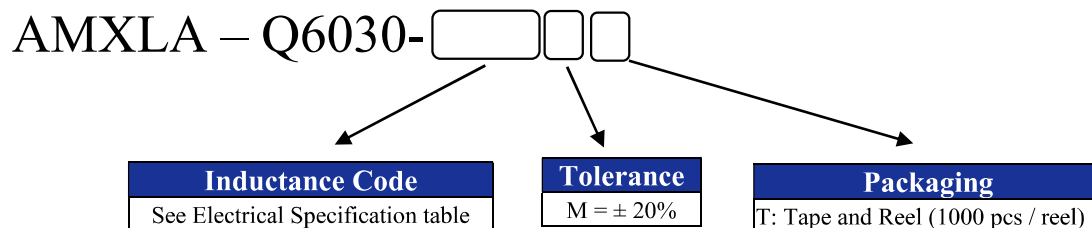


7.1 x 6.6 x 2.8 mm

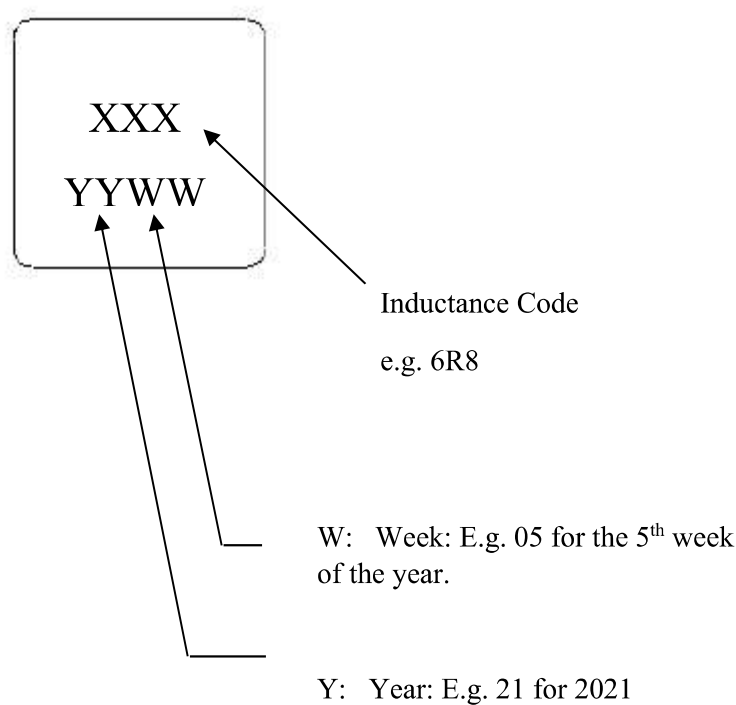
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Part Number Identification



Marking



Marking Method = Ink Marking



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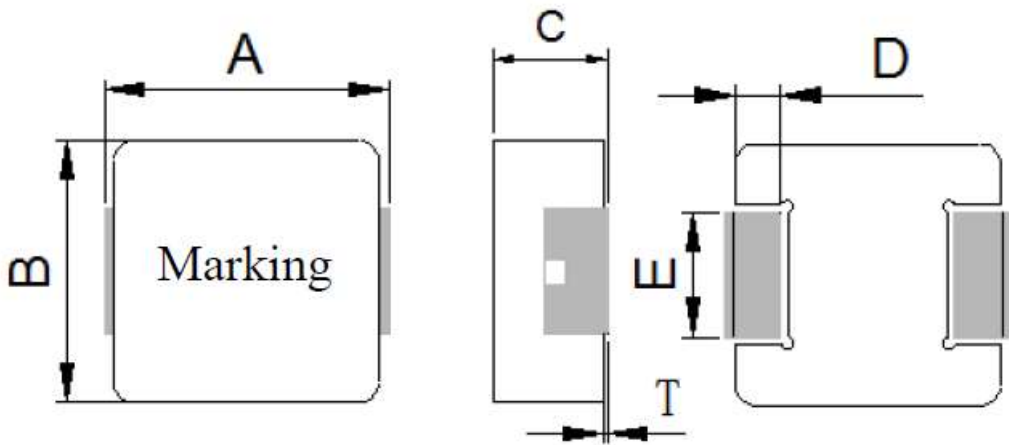


Check Inventory

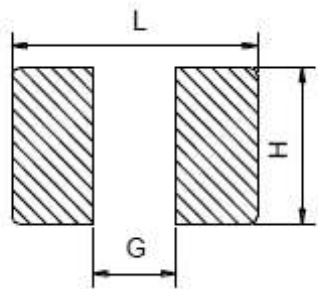


7.1 x 6.6 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Dimensions



Series	A	B	C	D	E	T
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



L	G	H
8.0 Ref.	3.7 Ref.	3.4 Ref.

Dimensions: mm

Molded SMD Power Inductor

Extended Temperature



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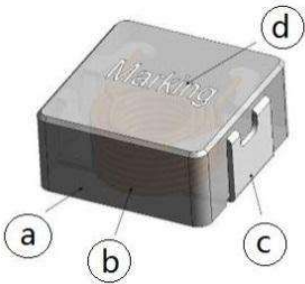


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Materials



	Components	Material
a	Core	Alloy powder
b	Wire	220 deg. C Flat Wire
c	Solder	100% Pb free solder
d	Ink	Halogen-free ketone



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ABRACON IS
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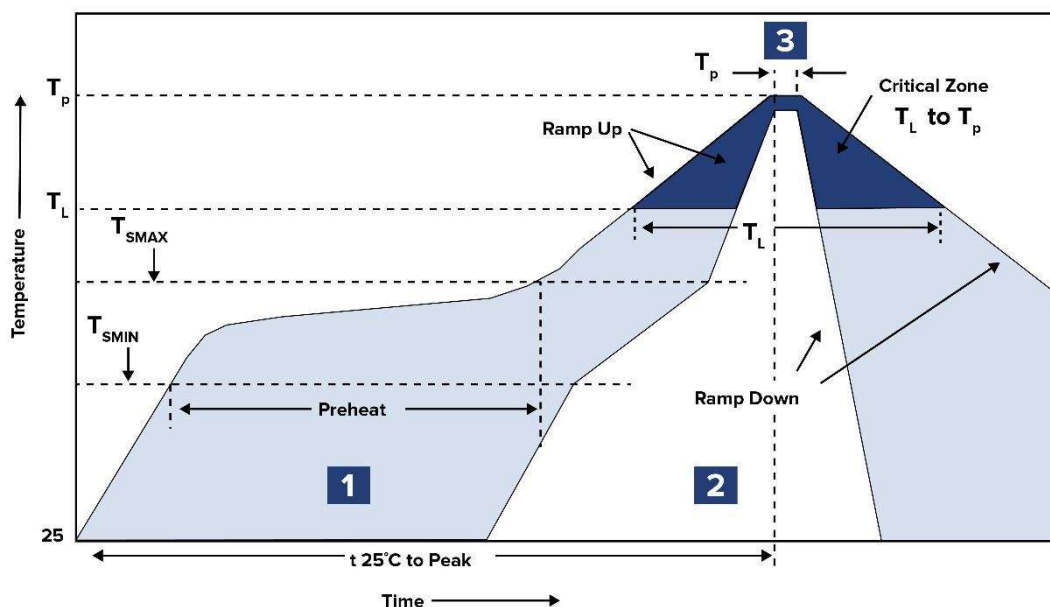


7.1 x 6.6 x 2.8 mm

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



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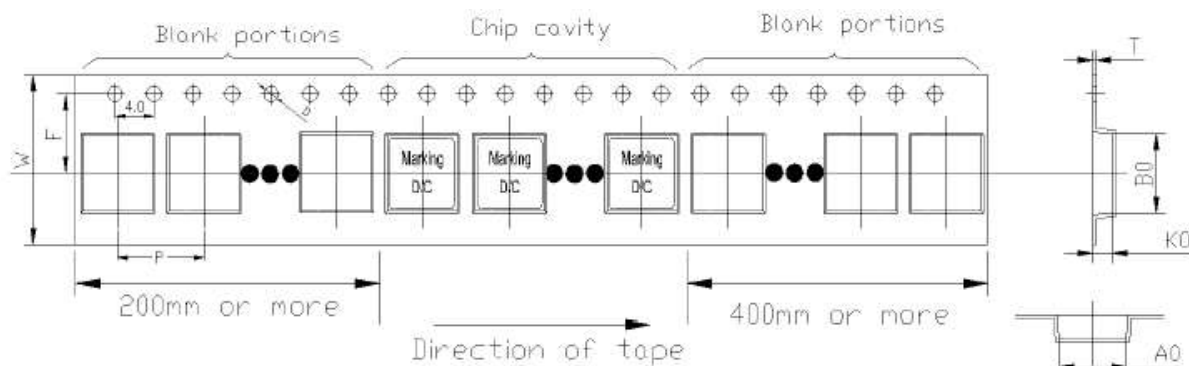
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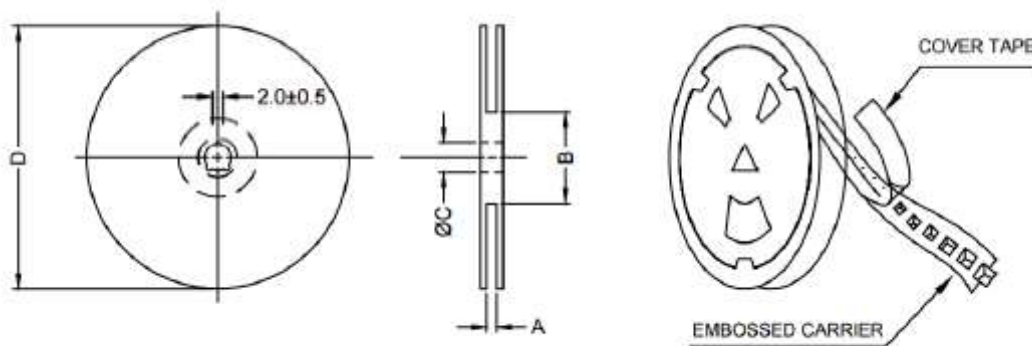
MSL Level = 1

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.
- iii) In no case shall ABRACON be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.
- iv) When changing your production process, please notify ABRACON immediately.
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- 3. **Payment Terms:** For each shipment, AB will invoice Buyer for the price of the Products plus all applicable taxes, packaging, transportation, insurance and other charges. Unless otherwise stated in a separate agreement or in AB's quotation, payments are due within thirty (30) days from the date of invoice, subject to AB's approval of Buyer's credit application. All invoicing disputes must be submitted in writing to AB within ten (10) days of the receipt of the invoice accompanied by a reasonably detailed explanation of the dispute. Payment of the undisputed amounts shall be made timely. AB reserves the right to require payment in advance or C.O.D. and otherwise modified credit terms. When partial shipments are made, payments for such shipments shall become due in accordance with the above terms upon submission of invoices. If, at the request of Buyer, shipment is postponed for more than thirty (30) days, payment will become due thirty days after notice to Buyer that Products



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are ready for shipment. Any unpaid due amounts will be subject to interest at one decimal five percent (1.5%) per month, or, if less, the maximum rate allowed by law.

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9. **Specifications:** Specifications for each Product are the specifications specified in the published datasheets of such Product, as of the date of AB's quotation (the "Specifications"). Except as otherwise agreed, AB reserves the right to modify the Specifications at any time without adversely affecting the functionality.
10. **Acceptance:** Unless Buyer notifies AB in writing within ten (10) days from the date of receipt of Products that the Products fail to conform to the Specifications, the Products will be deemed accepted by Buyer. No such claim of non-conformity shall be valid if (i) the Products have been altered, modified or damaged by Buyer, (ii) the rejection notice fails to explain the non-conformance in reasonable detail and is not accompanied by a test report evidencing the non-conformity, or (iii) rejected Products are not returned to AB within thirty (30) days of rejection; provided, that no Product returns may be made without a return material authorization issued by AB.
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