



AMXLA-Q1040

Request Samples



Check Inventory



11.0 x 10.0 x 3.8 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/1.0V		Max	Max	Max
Units	μH	%	mΩ	A	A
Symbol	L	M	DCR	Isat	Irms
AMXLA-Q1040-1R0M	1.00	20	3.07	26.0	24.0
AMXLA-Q1040-1R5M	1.50	20	4.50	24.0	19.0
AMXLA-Q1040-2R2M	2.20	20	7.20	18.0	15.0
AMXLA-Q1040-3R3M	3.30	20	11.8	16.0	12.0
AMXLA-Q1040-4R7M	4.70	20	15.3	13.0	10.0
AMXLA-Q1040-5R6M	5.60	20	17.5	11.0	9.6
AMXLA-Q1040-6R8M	6.80	20	22.3	10.0	9.0
AMXLA-Q1040-100M	10.0	20	33.0	8.0	7.0
AMXLA-Q1040-150M	15.0	20	50.0	6.5	6.0
AMXLA-Q1040-220M	22.0	20	72.0	5.7	5.0
AMXLA-Q1040-330M	33.0	20	117.7	4.5	4.2
AMXLA-Q1040-470M	47.0	20	167.0	4.0	3.4
AMXLA-Q1040-680M	68.0	20	240.0	2.8	3.0

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 25°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-Q1040 Series is RoHS Compliant and Pb free

AMXLA-Q1040 is AEC-Q200 qualified (-55°C ~ +180°C)



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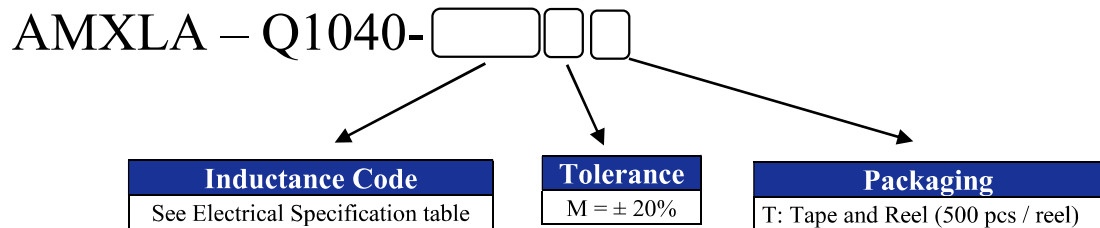


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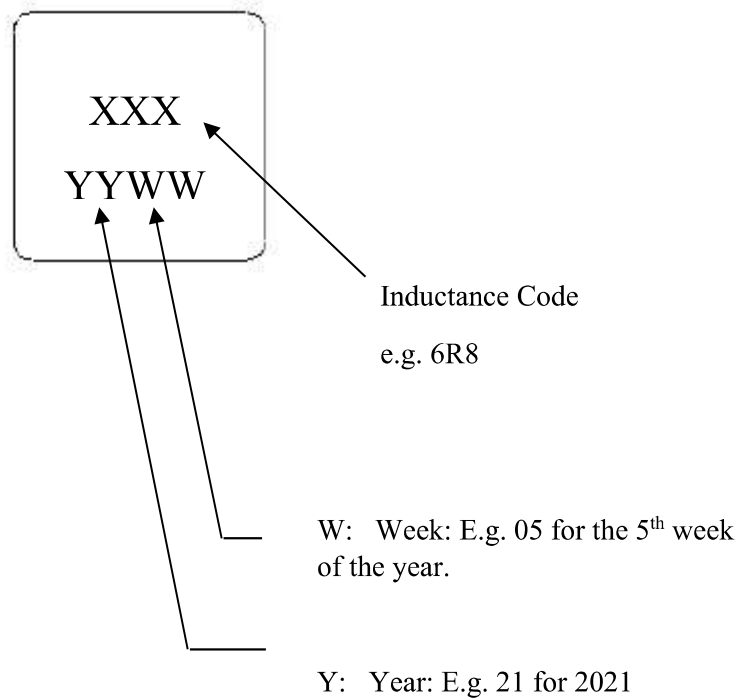


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Part Number Identification



Marking



Marking Method = Ink Marking



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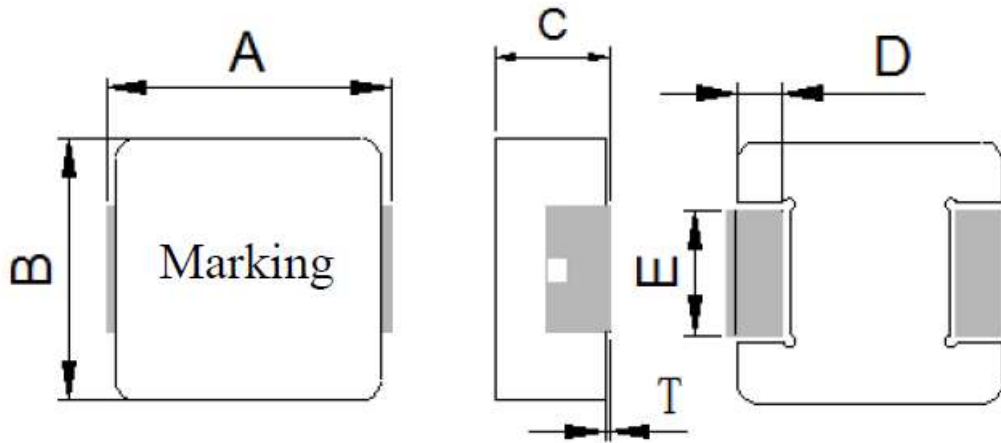


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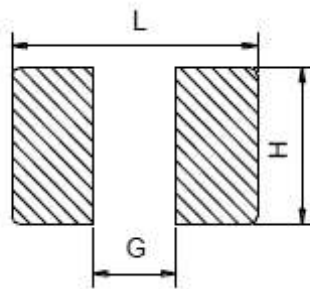


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Mechanical Dimensions



Series	A	B	C	D	E	T
AMXLA-Q1040	11.0 ± 0.3	10.0 ± 0.3	3.8 ± 0.2	2.0 ± 0.3	3.0 ± 0.3	0~0.2



L	G	H
12.5 Ref.	5.4 Ref.	3.5 Ref.

Dimensions: mm



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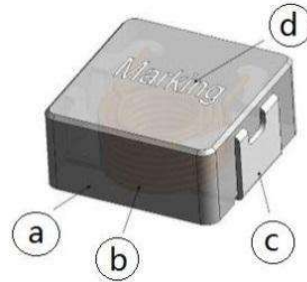


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Materials



	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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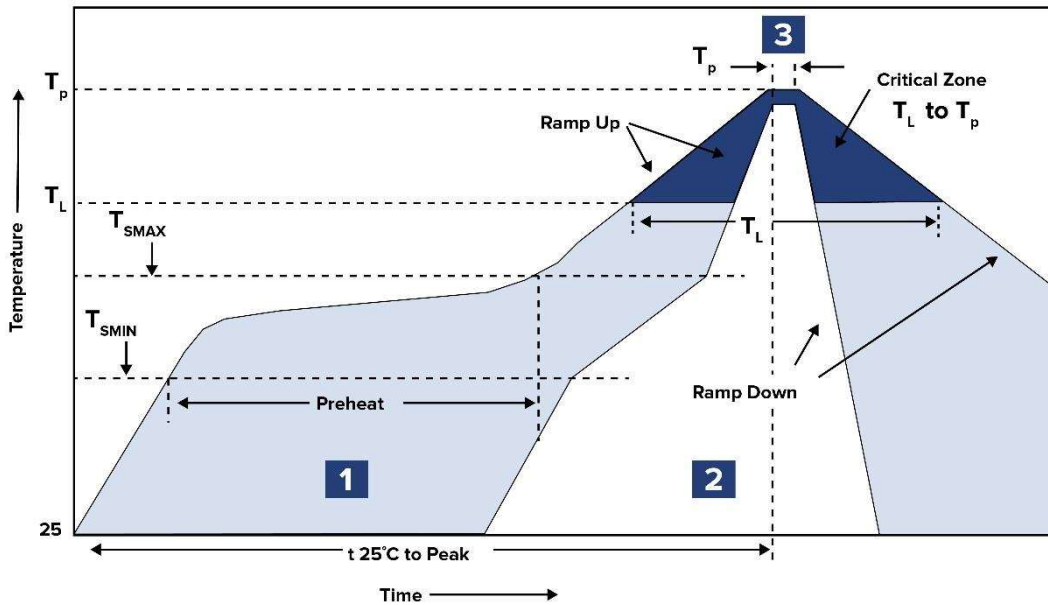


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Reflow Profile



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 260°C	10 sec. MAX

Molded SMD Power Inductor

Extended Temperature



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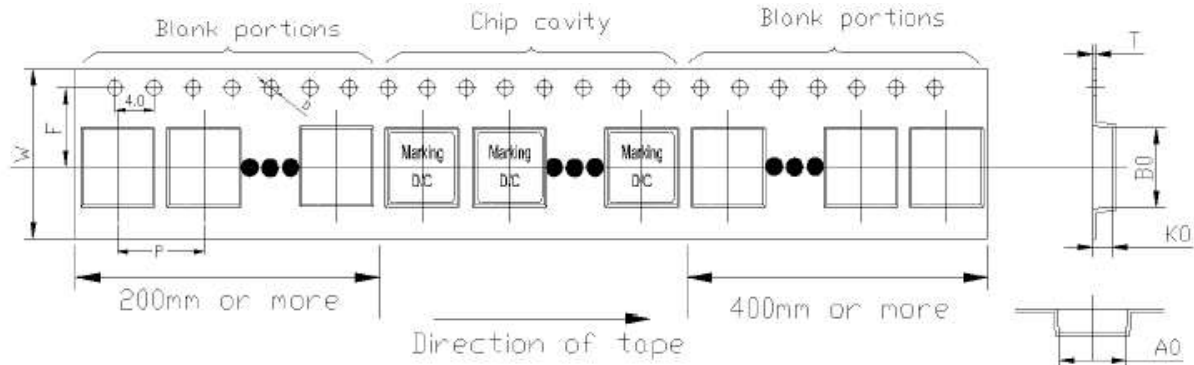
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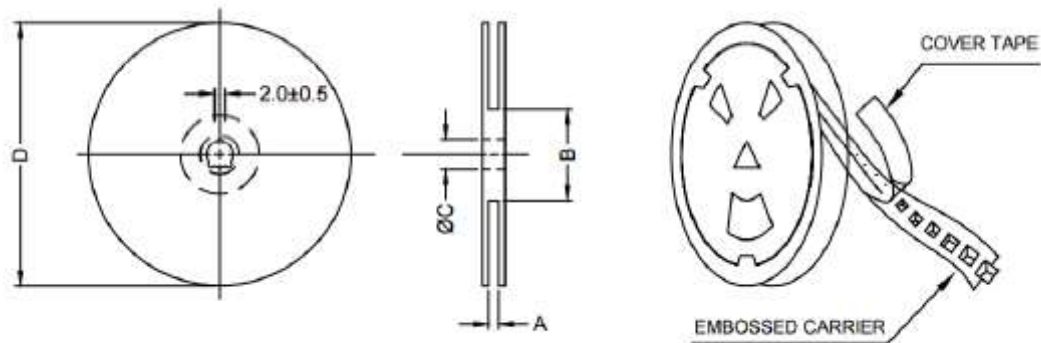
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Packaging

Tape & Reel: 500 pcs/reel



W	F	P	D	A ₀	B ₀	T	K ₀
24.0 ± 0.3	11.5 ± 0.1	16.0 ± 0.1	1.5 ± 0.1	10.4 ± 0.1	11.6 ± 0.1	0.35 ± 0.05	4.5 ± 0.1



A	B	C	D
24.4 + 2/-0	100 ± 2	13.5 + 0.5/-0.2	330

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ABRACON IS
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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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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.

4. **Delivery and Shipment:** Shipment dates are estimates only. Failure to deliver by a specified date shall neither entitle Buyer to any compensation nor impose any liability on AB. AB reserves the right to ship and bill ten percent more or less than the exact quantity specified on the face hereof. All shipments will be made Ex Works as per Incoterms 2000 from AB's place of shipment. In the absence of specific instructions, AB will select the carrier. Claims against AB for shortages must be made in writing within ten (10) days after the arrival of the shipment. AB is not required to notify Buyer of the shipment. Buyer shall pay all freight charges, insurance and other shipping expenses. Freight charges, insurance and other shipping expenses itemized in advance of actual shipment, if any, are estimates only that are calculated on the basis of standard tariffs and may not reflect actual costs. Buyer must pay actual costs.
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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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