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## FEATURES

- AEC-Q200 Qualified
- Shielded construction
- Soft saturation
- Low DCR per cubic mm
- Designed for switching frequencies between 100KHz-5MHz



## ELECTRICAL SPECIFICATIONS @ 25°C

PART NUMBER*	INDUCTANCE (uH)	TOLERANCE (%)	IRMS (A)	ISAT (A)	DC RESISTANCE (mΩ)		TYPE
					TYP	MAX	
AMDLA4012Q-R33MT	0.33	20	10	14	12	14.5	Lead Frame
AMDLA4012Q-R47MT	0.47	20	8.8	13	16.8	20	Lead Frame
AMDLA4012Q-1R0MT	1.0	20	5.2	7.8	36.5	43	Lead Frame
AMDLA4012Q-1R5MT	1.5	20	4.2	6.2	54.5	62	Lead Frame
AMDLA4012Q-2R2MT	2.2	20	3.5	5.5	72	80	Lead Frame
AMDLA4012Q-3R3MT	3.3	20	2.8	4.5	97	111	Lead Frame
AMDLA4012Q-4R7MT	4.7	20	2.2	3.2	119	143	Lead Frame

\* Please refer to Part Identification section

### Test Conditions

Inductance: 1 MHz, 1 V, 0 Adc

Humidity Range: 85 ± 2% RH

Temperature Rise Current: Current measured at Δ T of 40°C

Saturation Current: Current measured at Δ L of 30%

## GENERAL SPECIFICATIONS

**Operating Temperature:**  
-55°C to +125°C with (40°C rise) Irms current.

**Maximum Part Temperature:** +125°C

**Components Storage Temperature:**  
-55°C to +125°C

**Tape and Reel Packaging**

**Temperature:** -20°C to +65°C

**MSL:** Level 1

## MATERIALS

**Core:** Metal Alloy

**Wire:** Copper

**Terminal:** Tin Plating

**Ink:** Black

## PART BUILDER

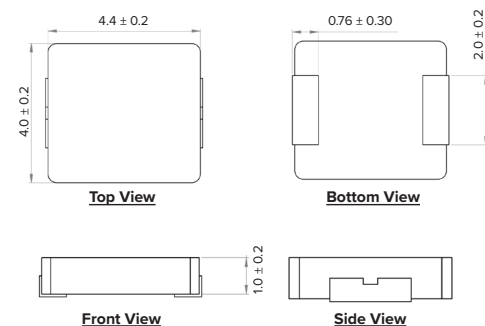


1. Tolerance: M = 20%

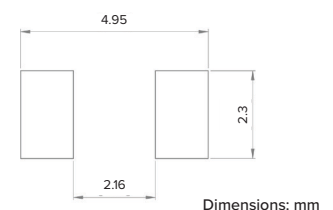
2. Packaging: B = Bulk  
T = Tape and Reel (4,000pcs/reel)

\*Refer to Electrical Specification table

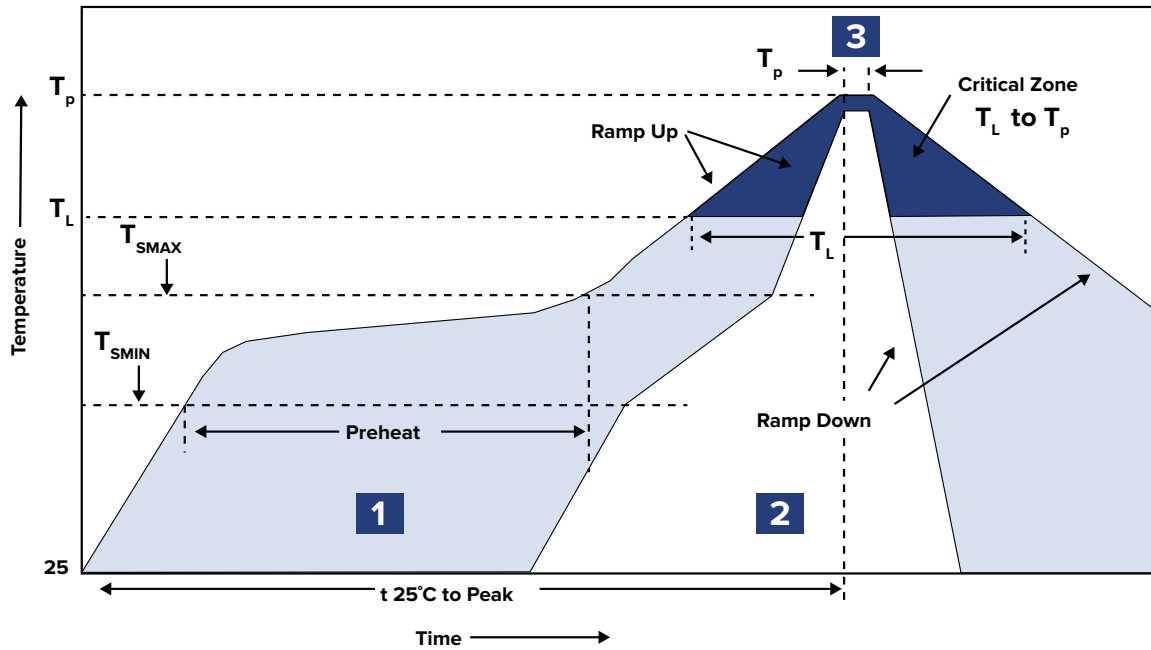
## PRODUCT DIMENSIONS



## RECOMMENDED LANDING PATTERN



## RECOMMENDED REFLOW PROFILE



ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	$T_{smin} \sim T_{smax}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	$T_L$ 230°C	30 ~ 40 sec.
3	Peak Heat	$T_P$ 250°C+0/-5°C	10 sec. MAX

## PACKAGING

Tape and Reel: 4,000  
 Units per Carton: 32,000  
 T&R per Carton: 8  
 Weight per Carton: 13.5 kg  
 Weight per Unit: 0.34 g  
 Carton Dimensions: 360 x 360 x 400 mm



TYPE	A	B	C	D
13" x 12 mm	12.4 +2/-0	100.0 ± 0.5	13.0 +0.5/-0.2	330.0



B <sub>0</sub>	A <sub>0</sub>	K <sub>0</sub>	P	W	F	T	D
4.85 ± 0.10	4.45 ± 0.10	1.40 ± 0.10	8.00 ± 0.10	12.00 ± 0.30	5.50 ± 0.10	0.30 ± 0.05	1.50

Dimensions: mm

This product is commercial off-the-shelf (COTS) and not specifically designed for automotive, military, aviation, aerospace, implantable, life-dependent medical or safety applications. This product is not recommended for use in any application requiring high reliability in which component failure could result in loss of life and/or property damage without prior written approval from Abracon. Specifications are subject to change without notice. Contact Abracon for more information.

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