# **AMDLA3010Q MOLDED INDUCTOR**



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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
	(un)				TYP	MAX	
AMDLA3010Q-R22MT	0.22	20	7.0	11	11	14	Lead Frame
AMDLA3010Q-R33MT	0.33	20	6.0	10	15	18	Lead Frame
AMDLA3010Q-R47MT	0.47	20	4.0	7.0	22	25	Lead Frame
AMDLA3010Q-1R0MT	1.0	20	2.8	5.0	40	48	Lead Frame
AMDLA3010Q-1R5MT	1.5	20	2.4	4.0	54	65	Lead Frame
AMDLA3010Q-2R2MT	2.2	20	1.8	3.5	87	100	Lead Frame
AMDLA3010Q-100MT	10.0	20	0.9	1.4	380	430	Lead Frame

<sup>\*</sup> Please refer to Part Identification section

#### **Test Conditions**

Inductance: 1 MHz, 1 V, 0 Adc Humidity Range: 65% RH

Temperature Rise Current: Current measured at  $\Delta$  T of 40°C Saturation Current: Current measured at  $\Delta$  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:** 

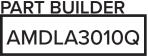
-55°C to +125°C

Tape and Reel Packaging Temperature: -20°C to +65°C

MSL: Level 1

### **MATERIALS**

Metal Alloy Core: Wire: Copper Terminal: Tin Plating Black Ink:



**1. Tolerance:** M = 20%

Series



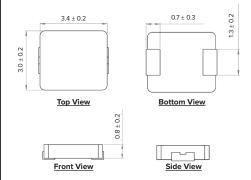




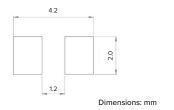
2. Packaging: B = Bulk

T = Tape and Reel (4,000pcs/reel)

# PRODUCT DIMENSIONS



#### RECOMMENDED LANDING PATTERN

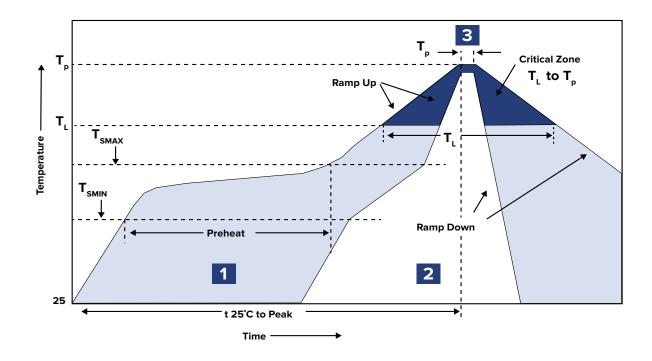




<sup>\*</sup>Refer to Electrical Specification table



# RECOMMENDED REFLOW PROFILE



ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	T <sub>smin</sub> ~ T <sub>smax</sub> 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T <sub>∟</sub> 230°C	30 ~ 40 sec.
3	Peak Heat	T <sub>P</sub> 250°C+0/-5°C	10 sec. MAX





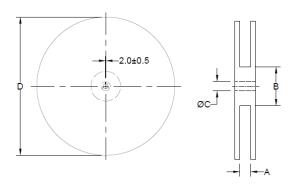
### **PACKAGING**

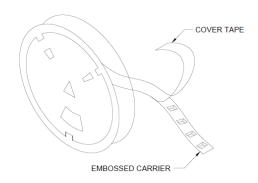
Tape and Reel: 4,000 Units per Carton: 32,000

T&R per Carton: 8

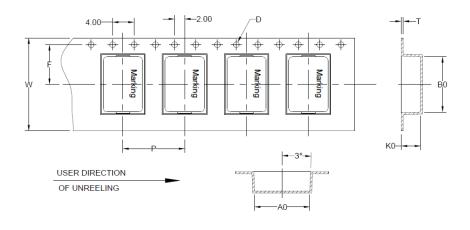
Weight per Carton: 12.0 kg Weight per Unit: 0.32 g

Carton Dimensions: 360 x 360 x 400 mm





TYPE	А	В	С	D
13" x 12 mm	12.4 +2/-0	100.0 ± 0.5	13.0 +0.5/-0.2	330.0



B <sub>o</sub>	$A_{o}$	K <sub>o</sub>	Р	W	F	T	D
$3.8 \pm 0.1$	$3.4 \pm 0.1$	1.5 ± 0.1	$8.0 \pm 0.1$	$12.0 \pm 0.3$	$5.5 \pm 0.1$	$0.3 \pm 0.05$	1.5

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.



Headquarters: