# **AMDLA3020Q 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	Tolerance	Irms	Isat	DC Resistance		Туре
	(uH)	(%)	(A)	(A)	(mΩ)		
					Тур	Max	
AMDLA3020Q-R22MT	0.22	20	9	12	8.0	10	Lead Frame
AMDLA3020Q-R33MT	0.33	20	8.0	8.5	12	15	Lead Frame
AMDLA3020Q-R47MT	0.47	20	7.0	8.0	15	18	Lead Frame
AMDLA3020Q-R68MT	0.68	20	6.0	6.0	22	26	Lead Frame
AMDLA3020Q-1R0MT	1	20	5.0	5.5	32	36	Lead Frame
AMDLA3020Q-1R5MT	1.5	20	4.2	4.5	34	39	Lead Frame
AMDLA3020Q-2R2MT	2.2	20	2.9	4.0	60	69	Lead Frame
AMDLA3020Q-3R3MT	3.3	20	2.6	3.7	77	94	Lead Frame
AMDLA3020Q-4R7MT	4.7	20	2.3	3.0	120	144	Lead Frame
AMDLA3020Q-6R8MT	6.8	20	1.6	2.1	185	220	Lead Frame
AMDLA3020Q-100MT	10	20	1.2	1.4	224	260	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 Δ 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:

## PART BUILDER



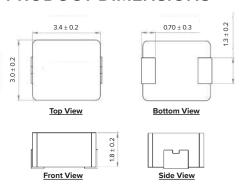
**1. Tolerance:** M = 20%

2. Packaging: B = Bulk

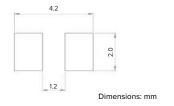
T = Tape and Reel (3,000pcs/reel)

\*Refer to Electrical Specification table

# PRODUCT DIMENSIONS

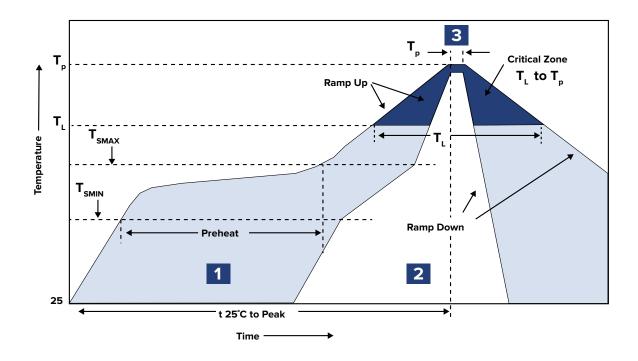


#### RECOMMENDED LANDING PATTERN





# RECOMMENDED REFLOW PROFILE

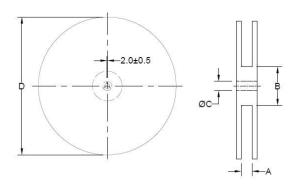


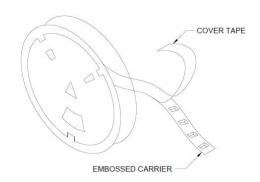
ZONE	DESCRIPTION	TEMPERATURE	TIMES		
1	Preheat	T <sub>smin</sub> ~ T <sub>smax</sub> 150°C ~ 180°C	60 ~ 120 sec.		
2	Reflow	T <sub>∟</sub> 230°C	30 ~ 40 sec.		
3	Peak Heat	T <sub>P</sub> 250°C+0/-5°C	10 sec. MAX		



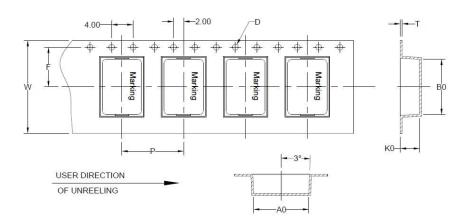
# **PACKAGING**

Tape and Reel: 3,000





TYPE	TYPE A		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 <sub>o</sub>	K <sub>o</sub>	Р	W	F	Т	D
$3.8 \pm 0.1$	$3.4 \pm 0.1$	$2.3 \pm 0.1$	$8.0 \pm 0.1$	12.0 ± 0.3	5.5 ± 0.1	$0.3 \pm 0.05$	1.5

Dimensions: mm

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