

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 (%) | I _{rms} (A) | I _{sat} (A) | DC Resistance (mΩ) | | Type |
|------------------|-----------------|---------------|----------------------|----------------------|--------------------|-----|------------|
| | | | | | Typ | 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 |

* 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 Δ L of 30%

GENERAL SPECIFICATIONS

Operating Temperature:
-55°C to +125°C with (40°C rise) I_{rms} 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



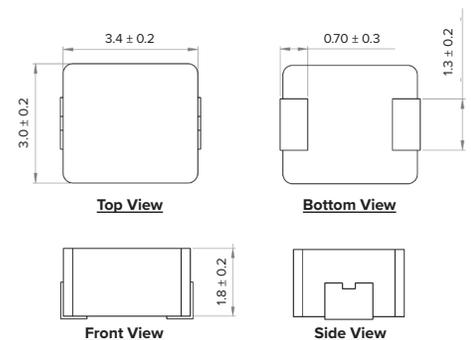
1. Tolerance: M = 20%

2. Packaging: B = Bulk

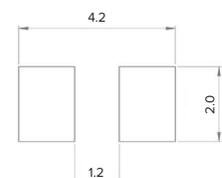
T = Tape and Reel (3,000pcs/reel)

*Refer to Electrical Specification table

PRODUCT DIMENSIONS

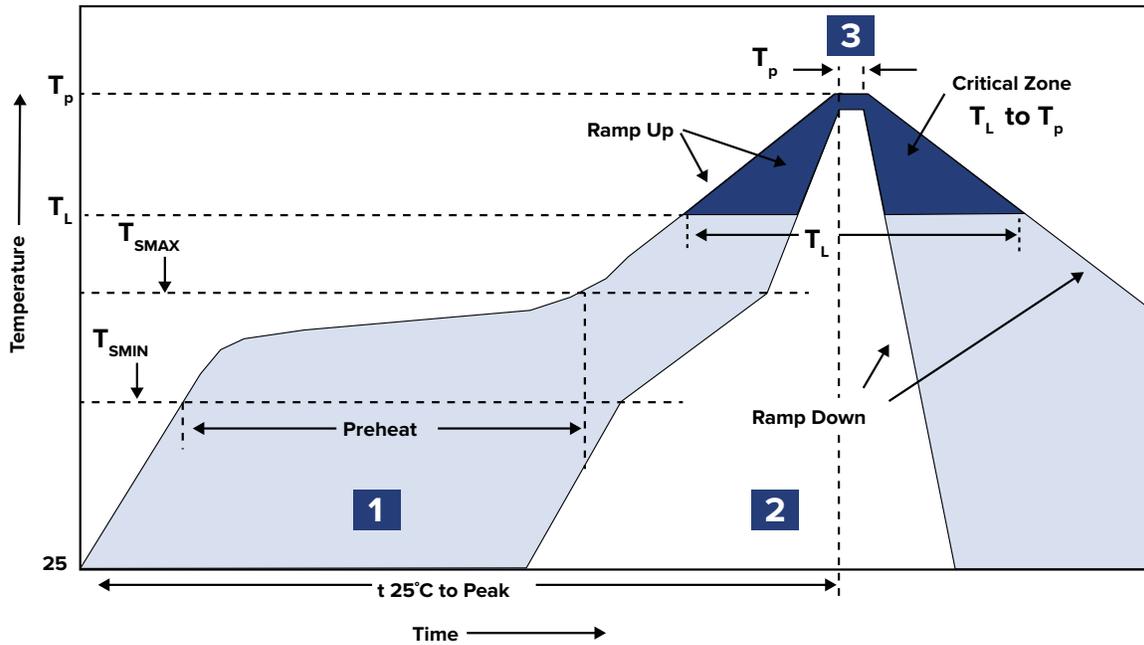


RECOMMENDED LANDING PATTERN



Dimensions: mm

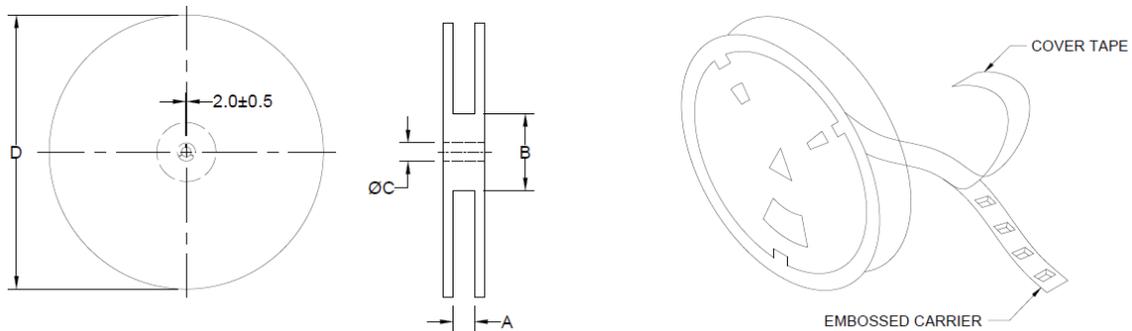
RECOMMENDED REFLOW PROFILE



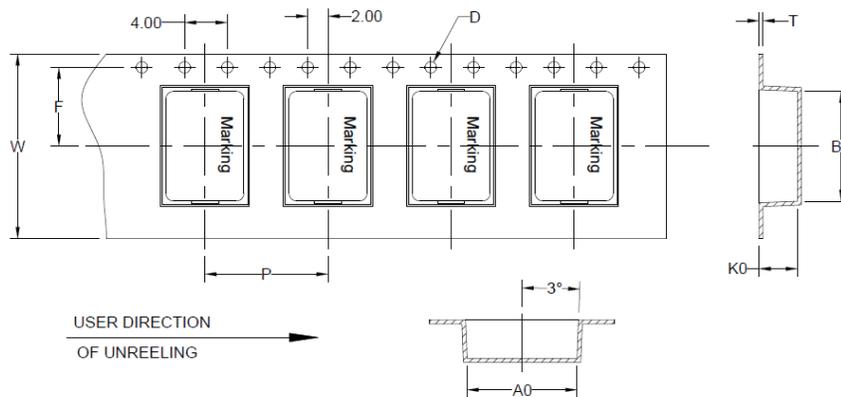
| ZONE | DESCRIPTION | TEMPERATURE | TIMES |
|------|-------------|---|---------------|
| 1 | Preheat | $T_{smin} \sim T_{smax}$ 150°C ~ 180°C | 60 ~ 120 sec. |
| 2 | Reflow | T_L 230°C | 30 ~ 40 sec. |
| 3 | Peak Heat | T_P 250°C+0/-5°C | 10 sec. MAX |

PACKAGING

Tape and Reel: 3,000



| 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 ₀ | A ₀ | K ₀ | P | W | F | T | D |
|----------------|----------------|----------------|-----------|------------|-----------|------------|-----|
| 3.8 ± 0.1 | 3.4 ± 0.1 | 2.3 ± 0.1 | 8.0 ± 0.1 | 12.0 ± 0.3 | 5.5 ± 0.1 | 0.3 ± 0.05 | 1.5 |

Dimensions: mm

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