

## FEATURES

- AEC-Q200 Qualified
- Shielded construction
- Soft saturation
- Low DCR per cubic mm
- Designed for switching frequencies between 100KHz-2MHz



## ELECTRICAL SPECIFICATIONS @ 25°C

| PART NUMBER*     | INDUCTANCE (uH) | TOLERANCE (%) | IRMS (A) | ISAT (A) | DC RESISTANCE (mΩ) |      | TYPE       |
|------------------|-----------------|---------------|----------|----------|--------------------|------|------------|
|                  |                 |               |          |          | TYP                | MAX  |            |
| AMDLA2213Q-1R5MT | 1.5             | 20            | 57       | 48       | 1.0                | 1.15 | Lead Frame |
| AMDLA2213Q-2R0MT | 2.0             | 20            | 54       | 45       | 1.02               | 1.2  | Lead Frame |
| AMDLA2213Q-2R2MT | 2.2             | 20            | 52       | 43       | 1.05               | 1.25 | Lead Frame |
| AMDLA2213Q-3R0MT | 3.0             | 20            | 48       | 39       | 1.42               | 1.64 | Lead Frame |
| AMDLA2213Q-3R3MT | 3.3             | 20            | 47       | 37       | 1.5                | 1.75 | Lead Frame |
| AMDLA2213Q-4R7MT | 4.7             | 20            | 44       | 34       | 1.9                | 2.2  | Lead Frame |
| AMDLA2213Q-6R8MT | 6.8             | 20            | 36       | 32       | 2.7                | 3.1  | Lead Frame |
| AMDLA2213Q-100MT | 10              | 20            | 30       | 20       | 3.8                | 4.15 | Lead Frame |
| AMDLA2213Q-220MT | 22              | 20            | 18       | 14       | 9.2                | 11   | Lead Frame |
| AMDLA2213Q-230MT | 23              | 20            | 18       | 14       | 9.2                | 11   | Lead Frame |
| AMDLA2213Q-330MT | 33              | 20            | 16       | 10.5     | 13.5               | 15.4 | Lead Frame |
| AMDLA2213Q-470MT | 47              | 20            | 14       | 10       | 17.3               | 20.8 | Lead Frame |
| AMDLA2213Q-680MT | 68              | 20            | 12       | 9.0      | 26.2               | 29.5 | Lead Frame |
| AMDLA2213Q-750MT | 75              | 20            | 11       | 8.5      | 27.5               | 31.6 | Lead Frame |
| AMDLA2213Q-820MT | 82              | 20            | 10       | 7.7      | 31.0               | 34.2 | Lead Frame |
| AMDLA2213Q-101MT | 100             | 20            | 9.5      | 7.5      | 36.0               | 40   | Lead Frame |

\* Please refer to Part Identification section

### Test Conditions

Inductance: 100 kHz, 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 +155°C with (40°C rise) Irms current.

### Maximum Part Temperature: +155°C

### Components Storage Temperature:

-55°C to +125°C

### Tape and Reel Packaging

Temperature: -55°C to +80°C

MSL: Level 1

## MATERIALS

Core: Metal Alloy

Wire: Copper

Terminal: Tin Plating

Ink: Black

## PART BUILDER

|            |   |             |                   |                        |
|------------|---|-------------|-------------------|------------------------|
| AMDLA2213Q | — | 1R0         | M                 | T                      |
| Series     |   | Inductance* | Tol. <sup>1</sup> | Packaging <sup>2</sup> |

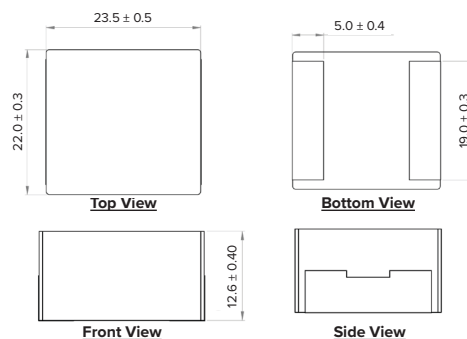
1. Tolerance: M = 20%

2. Packaging: B = Bulk

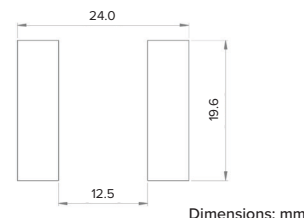
T = Tape and Reel (80pcs/reel)

\*Refer to Electrical Specification table

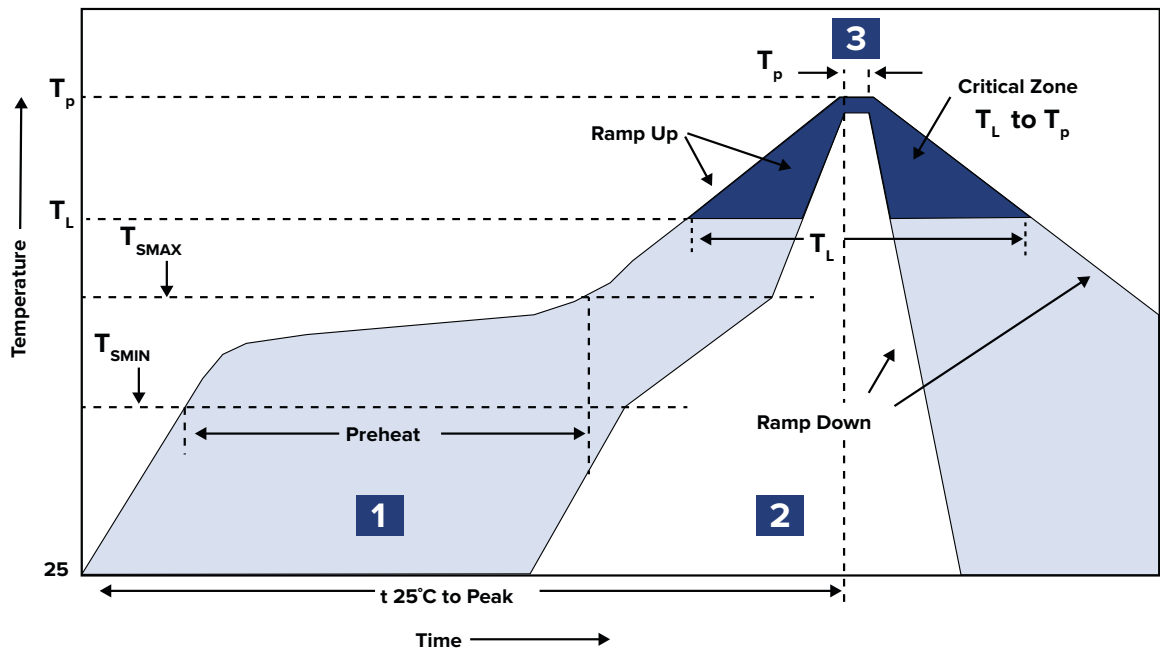
## PRODUCT DIMENSIONS



### RECOMMENDED LANDING PATTERN



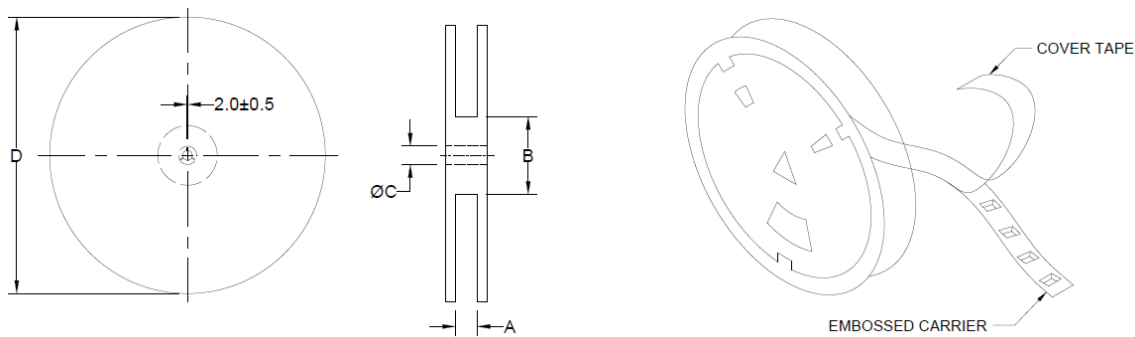
RECOMMENDED REFLOW PROFILE



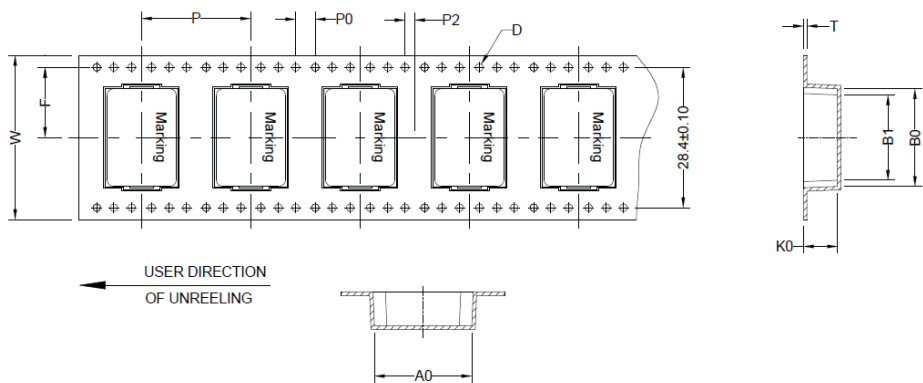
| ZONE | DESCRIPTION | TEMPERATURE                               | TIMES         |
|------|-------------|-------------------------------------------|---------------|
| 1    | Preheat     | $T_{smin} \sim T_{smax}$<br>150°C ~ 200°C | 60 ~ 180 sec. |
| 2    | Reflow      | $T_L$<br>217°C                            | 60 ~ 150 sec. |
| 3    | Peak Heat   | $T_p$<br>260°C                            | 10 sec. MAX   |

PACKAGING

Tape and Reel: 80  
Units per Carton: 320  
T&R per Carton: 4  
Weight per Carton: 14.9 kg  
Weight per Unit: 35.5 g  
Carton Dimensions: 410 x 325 x 415 mm



| TYPE        | A          | B           | C              | D     |
|-------------|------------|-------------|----------------|-------|
| 13" x 44 mm | 44.4 +2/-0 | 100.0 ± 2.0 | 13.0 +0.5/-0.2 | 330.0 |



| B <sub>0</sub> | A <sub>0</sub> | K <sub>0</sub> | P          | P <sub>0</sub> | P <sub>2</sub> | W          | F          | T          | D         |
|----------------|----------------|----------------|------------|----------------|----------------|------------|------------|------------|-----------|
| 25.0 ± 0.1     | 23.0 ± 0.1     | 13.6 ± 0.1     | 32.0 ± 0.1 | 4.0 ± 0.05     | 2.0 ± 0.05     | 44.0 ± 0.3 | 20.2 ± 0.1 | 0.5 ± 0.05 | 1.5 ± 0.1 |

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.