



## FEATURES

- Shielded construction
- Soft saturation
- High operating temperature up to 155°C
- Designed for switching frequencies between 100KHz-2MHz



## ELECTRICAL SPECIFICATIONS @ 25°C

| PART NUMBER*     | INDUCTANCE (uH) | TOLERANCE (%) | IRMS (A) | ISAT (A) | DC RESISTANCE (mΩ) |      |
|------------------|-----------------|---------------|----------|----------|--------------------|------|
|                  |                 |               |          |          | TYP                | MAX  |
| AMDLA7030S-R15NT | 0.15            | 30            | 25.0     | 36.0     | 1.7                | 2.1  |
| AMDLA7030S-R22MT | 0.22            | 20            | 21.0     | 32.0     | 2.0                | 2.5  |
| AMDLA7030S-R33MT | 0.33            | 20            | 20.0     | 22.0     | 2.8                | 3.4  |
| AMDLA7030S-R36MT | 0.36            | 20            | 18.0     | 21.0     | 3.3                | 3.9  |
| AMDLA7030S-R47MT | 0.47            | 20            | 16.0     | 18.0     | 3.4                | 4.0  |
| AMDLA7030S-R56MT | 0.56            | 20            | 15.0     | 16.0     | 3.9                | 4.5  |
| AMDLA7030S-R68MT | 0.68            | 20            | 14.5     | 15.0     | 4.7                | 5.3  |
| AMDLA7030S-R82MT | 0.82            | 20            | 13.0     | 14.0     | 5.4                | 6.0  |
| AMDLA7030S-1R0MT | 1               | 20            | 11.0     | 13.5     | 5.7                | 7.4  |
| AMDLA7030S-1R2MT | 1.2             | 20            | 9.5      | 12.5     | 7.7                | 9.5  |
| AMDLA7030S-1R5MT | 1.5             | 20            | 9.0      | 12.0     | 10.2               | 12.1 |
| AMDLA7030S-2R2MT | 2.2             | 20            | 7.5      | 9.0      | 13.5               | 15.0 |
| AMDLA7030S-2R7MT | 2.7             | 20            | 7.0      | 8.8      | 17.3               | 20.0 |
| AMDLA7030S-3R3MT | 3.3             | 20            | 6.0      | 8.5      | 19.0               | 22.0 |
| AMDLA7030S-4R7MT | 4.7             | 20            | 5.0      | 5.5      | 28.0               | 33.0 |
| AMDLA7030S-5R6MT | 5.6             | 20            | 5.0      | 5.2      | 39.0               | 42.0 |
| AMDLA7030S-6R8MT | 6.8             | 20            | 4.2      | 5.0      | 43.0               | 50.0 |
| AMDLA7030S-8R2MT | 8.2             | 20            | 4.0      | 4.7      | 54.0               | 60.0 |
| AMDLA7030S-100MT | 10              | 20            | 3.5      | 4.5      | 62.0               | 68.0 |
| AMDLA7030S-150MT | 15              | 20            | 2.5      | 4.0      | 110                | 140  |
| AMDLA7030S-220MT | 22              | 20            | 2.0      | 2.5      | 150                | 190  |
| AMDLA7030S-330MT | 33              | 20            | 1.8      | 2.0      | 215                | 258  |

\* 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 +155°C

### Tape and Reel Packaging

Temperature: -55°C to +80°C

MSL: Level 1

## MATERIALS

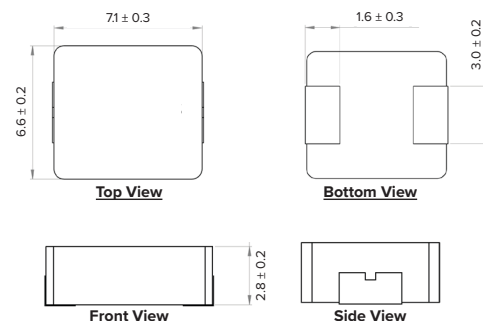
Core: Metal Alloy

Wire: Copper

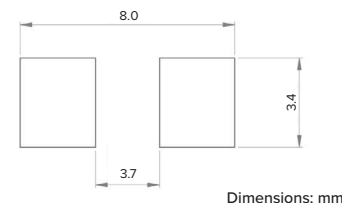
Terminal: Tin Plating

Ink: Black

## PRODUCT DIMENSIONS



### RECOMMENDED LANDING PATTERN



## PART BUILDER

AMDLA7030S

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1R0

M

T

Series

Inductance\*

Tol. <sup>1</sup>

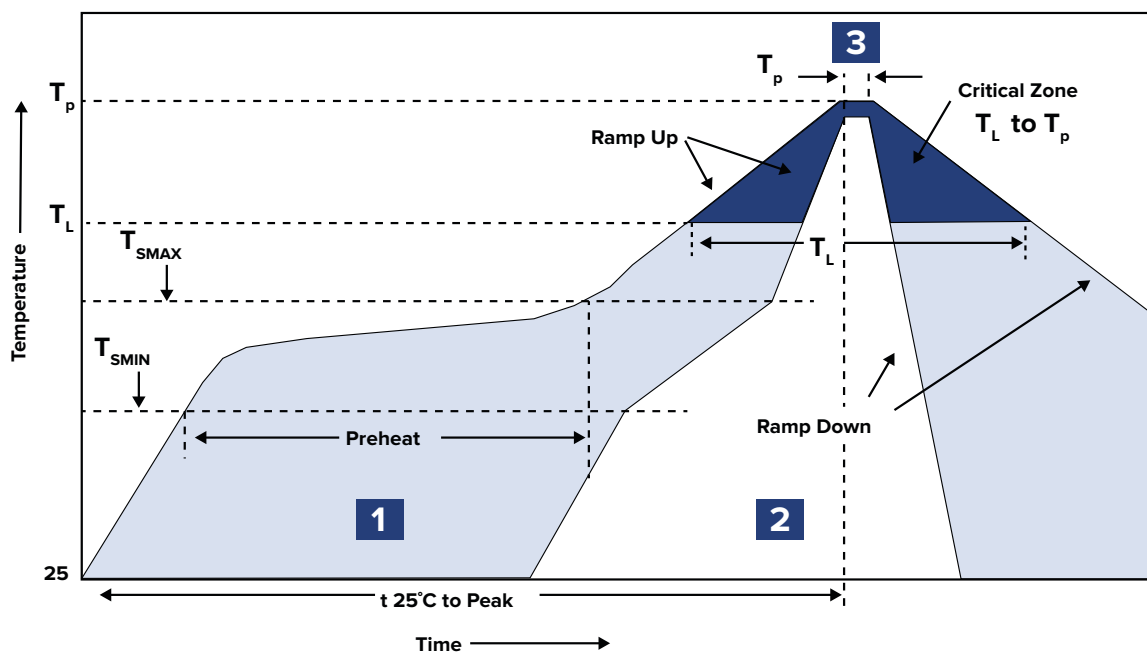
Packaging <sup>2</sup>

1. Tolerance: M = 20%  
N = 30%

2. Packaging: B = Bulk  
T = Tape and Reel (1,000pcs/reel)

\*Refer to Electrical Specification table

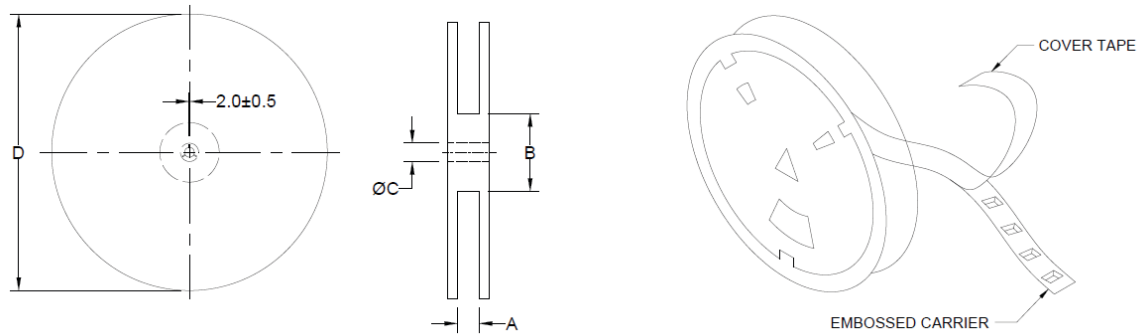
## RECOMMENDED REFLOW PROFILE



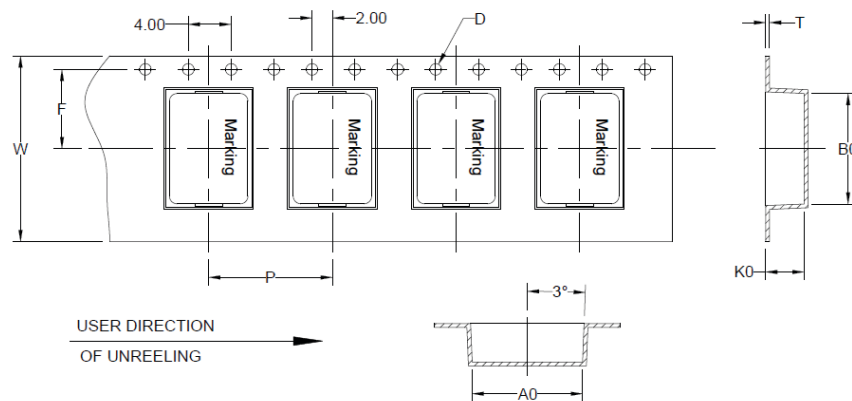
| ZONE | DESCRIPTION | TEMPERATURE                               | TIMES         |
|------|-------------|-------------------------------------------|---------------|
| 1    | Preheat     | $T_{smin} \sim T_{smax}$<br>150°C ~ 200°C | 60 ~ 180 sec. |
| 2    | Reflow      | $T_L$<br>217°C              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

## PACKAGING

Tape and Reel: 1,000  
 Units per Carton: 8,000  
 T&R per Carton: 8  
 Weight per Carton: 11.0kg  
 Weight per Piece: 0.7g  
 Carton Dimensions: 410 x 325 x 415mm



| TYPE        | A          | B         | C          | D   |
|-------------|------------|-----------|------------|-----|
| 13" x 16 mm | 16.4 +2/-0 | 100 ± 2.0 | 13.5 ± 0.5 | 330 |



| B <sub>0</sub> | A <sub>0</sub> | K <sub>0</sub> | P          | W          | F         | T           | D         |
|----------------|----------------|----------------|------------|------------|-----------|-------------|-----------|
| 7.7 ± 0.1      | 7.0 ± 0.1      | 3.3 ± 0.1      | 12.0 ± 0.1 | 16.0 ± 0.3 | 7.5 ± 0.1 | 0.35 ± 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.