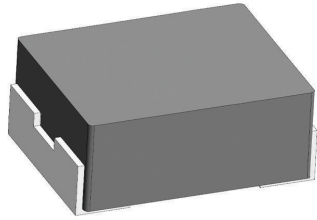


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## FEATURES

- Shielded construction
- Soft saturation
- High efficiency
- Designed for switching frequencies between 100KHz-5MHz
- Automotive option available upon request



## ELECTRICAL SPECIFICATIONS @ 25°C

PART NUMBER*	INDUCTANCE (uH)	TOLERANCE (%)	IRMS (A)	ISAT (A)	DC RESISTANCE (mΩ)		TYPE
					TYP	MAX	
AMELA2010S-R22MT	0.22	20	6.5	8.5	15	17	Lead Frame
AMELA2010S-R33MT	0.33	20	5.5	6.5	16.5	20	Lead Frame
AMELA2010S-R47MT	0.47	20	4.1	5.5	23	29	Lead Frame
AMELA2010S-R68MT	0.68	20	3.6	4.6	36	44	Lead Frame
AMELA2010S-1R0MT	1.0	20	3.4	4.0	44	53	Lead Frame
AMELA2010S-1R5MT	1.5	20	2.8	3.0	61	70	Lead Frame
AMELA2010S-2R2MT	2.2	20	2.0	2.6	90	105	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) 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

Core: Metal Alloy

Wire: Copper

Terminal: Tin Plating

Ink: Black

## PART BUILDER

AMELA2010S	—	1R0	M	T
Series		Inductance*	Tol. <sup>1</sup>	Packaging <sup>2</sup>

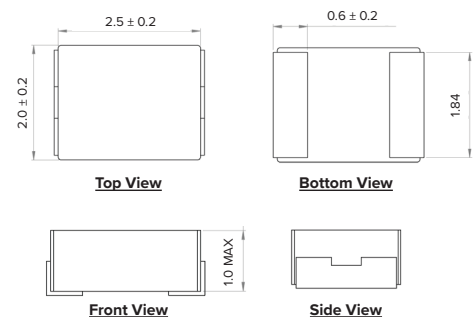
1. Tolerance: M = 20%

2. Packaging: B = Bulk

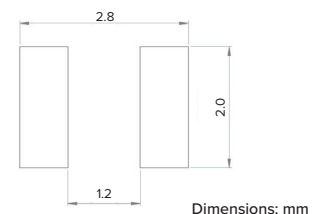
T = Tape and Reel (3,000pcs/reel)

\*Refer to Electrical Specification table

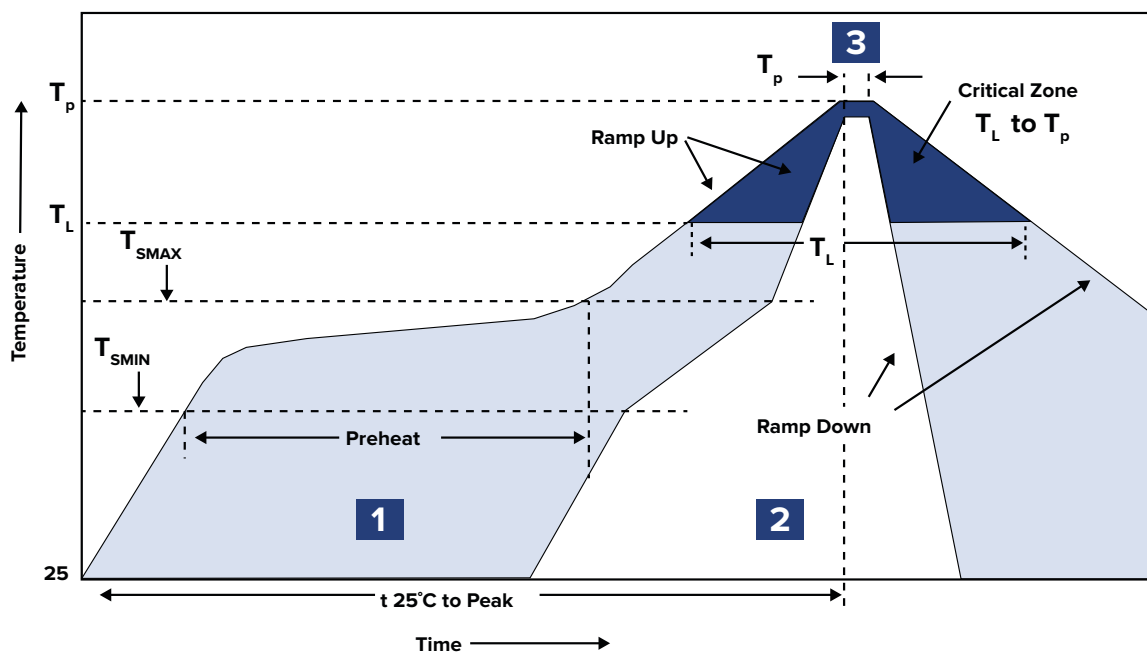
## PRODUCT DIMENSIONS



## RECOMMENDED LANDING PATTERN



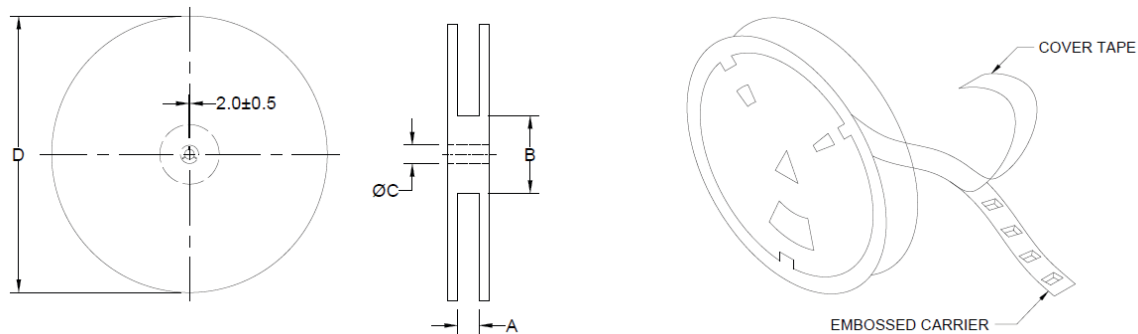
## RECOMMENDED REFLOW PROFILE



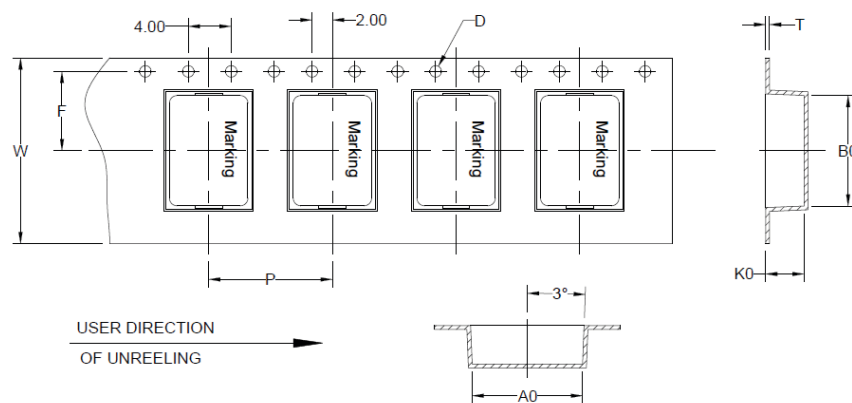
ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	$T_{smin} \sim T_{smax}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	$T_L$ 230°C	30 ~ 40 sec.
3	Peak Heat	$T_P$ 250°C±0/-5°C	10 sec. MAX

## PACKAGING

Tape and Reel: 3,000  
 Units per Carton: 144,000  
 T&R per Carton: 48  
 Weight per Carton: 6.0 kg  
 Weight per Unit: 0.06 g  
 Carton Dimensions: 450 x 380 x 210 mm



TYPE	A	B	C	D
7" x 8 mm	9.7 ± 0.5	50.0 ± 0.5	13.0 ± 0.1	183 ± 3.0



B <sub>0</sub>	A <sub>0</sub>	K <sub>0</sub>	P	W	F	T	D
2.85 ± 0.1	2.4 ± 0.1	1.15 ± 0.05	4.0 ± 0.1	8.0 ± 0.1	3.5 ± 0.1	0.25 ± 0.03	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.

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[AMELA2010S-R47MT](#) [AMELA2010S-R68MT](#)