

FEATURES

- Shielded construction
- Soft saturation
- Low DCR per cubic mm
- 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	
AMDLA4020S-R12MT	0.12	20	15	30	3.5	4.2	Lead Frame
AMDLA4020S-R22MT	0.22	20	14	24	6.2	7.4	Lead Frame
AMDLA4020S-R33MT	0.33	20	11	14	7.0	8.4	Lead Frame
AMDLA4020S-R47MT	0.47	20	10	14	9.4	11.3	Lead Frame
AMDLA4020S-R68MT	0.68	20	9.0	12	13.3	16	Lead Frame
AMDLA4020S-1R0MT	1.0	20	6.5	9.0	16.4	20	Lead Frame
AMDLA4020S-1R5MT	1.5	20	4.8	7.5	22	26	Lead Frame
AMDLA4020S-2R2MT	2.2	20	4.5	6.0	31.5	38	Lead Frame
AMDLA4020S-3R3MT	3.3	20	3.5	5.0	45	54	Lead Frame
AMDLA4020S-4R7MT	4.7	20	3.0	4.5	58	70	Lead Frame
AMDLA4020S-6R8MT	6.8	20	2.4	3.5	86	103	Lead Frame
AMDLA4020S-100MT	10.0	20	2.0	3.5	170	190	Lead Frame
AMDLA4020S-150MT	15.0	20	1.8	2.6	240	275	Lead Frame
AMDLA4020S-220MT	22.0	20	1.2	2.1	265	320	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

AMDLA4020S	—	1R0	M	T
Series		Inductance*	Tol. ¹	Packaging ²

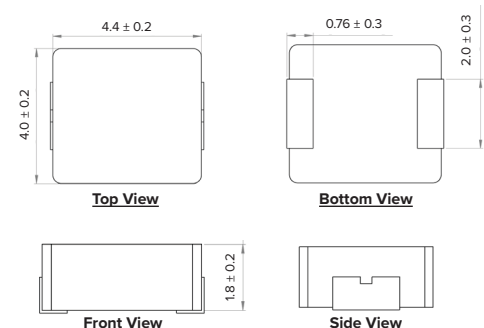
1. Tolerance: M = 20%

2. Packaging: B = Bulk

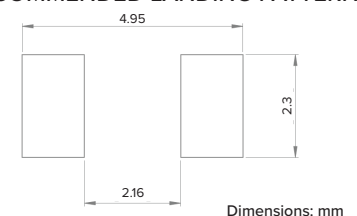
T = Tape and Reel (3,000pcs/reel)

*Refer to Electrical Specification table

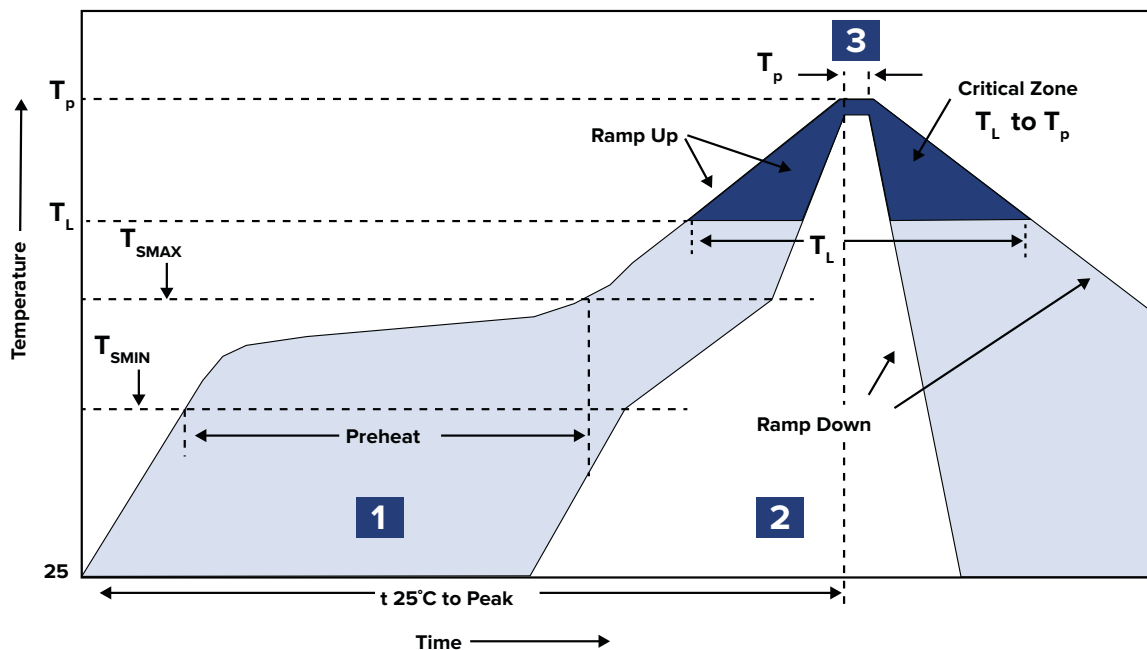
PRODUCT DIMENSIONS



RECOMMENDED LANDING PATTERN



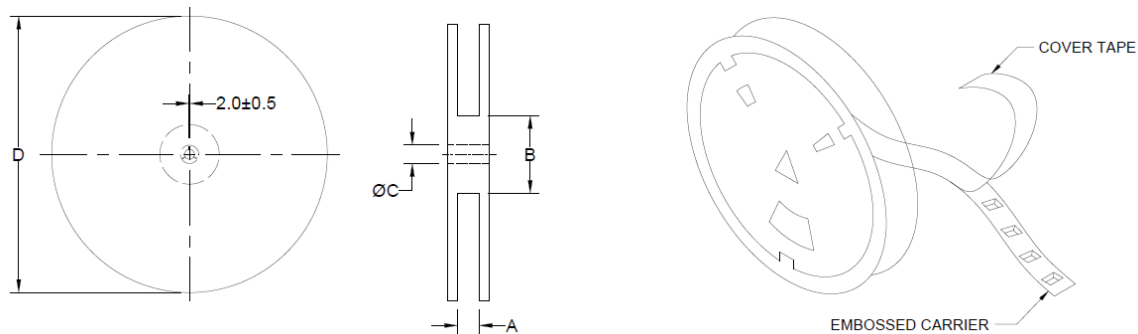
RECOMMENDED REFLOW PROFILE



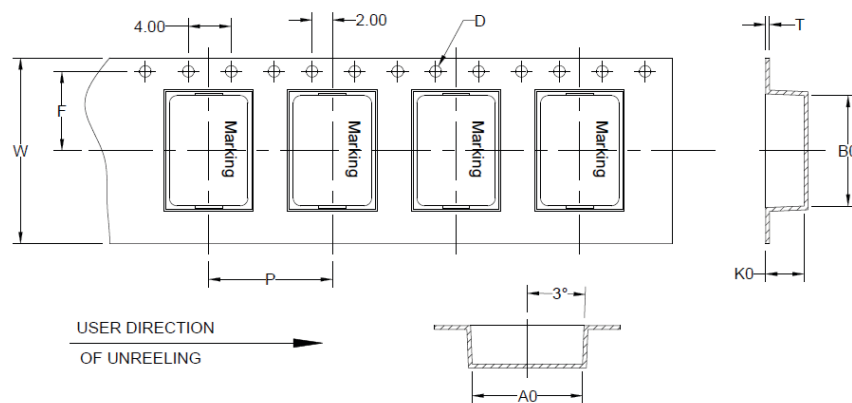
ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	$T_{smin} \sim T_{smax}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_L 230°C	30 ~ 40 sec.
3	Peak Heat	T_p 250°C+0/-5°C	10 sec. MAX

PACKAGING

Tape and Reel: 3,000
 Units per Carton: 24,000
 T&R per Carton: 8
 Weight per Carton: 14.5 kg
 Weight per Unit: 0.43 g
 Carton Dimensions: 360 x 360 x 400 mm



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
4.85 ± 0.1	4.45 ± 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

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.