

FEATURES

- Shielded construction
- Soft saturation
- Low DCR per cubic mm
- Designed for switching frequencies between 100KHz-2MHz
- Automotive option available upon request



ELECTRICAL SPECIFICATIONS @ 25°C

PART NUMBER*	INDUCTANCE (uH)	TOLERANCE (%)	IRMS (A)	ISAT (A)	DC RESISTANCE (mΩ)		TYPE
					TYP	MAX	
AMDLA1004S-R15NT	0.15	30	44	82	0.5	0.6	Non-Lead Frame
AMDLA1004S-R22MT	0.22	20	36	70	0.72	0.83	Non-Lead Frame
AMDLA1004S-R36MT	0.36	20	33	51	1.05	1.18	Non-Lead Frame
AMDLA1004S-R42MT	0.42	20	32	50	1.15	1.3	Non-Lead Frame
AMDLA1004S-R47MT	0.47	20	32	46	1.3	1.5	Non-Lead Frame
AMDLA1004S-R56MT	0.56	20	25	34	1.6	1.8	Non-Lead Frame
AMDLA1004S-R68MT	0.68	20	23	31	1.9	2.2	Non-Lead Frame
AMDLA1004S-1R0MT	1.0	20	20	29	2.9	3.25	Non-Lead Frame
AMDLA1004S-1R5MT	1.5	20	17.5	26	3.7	4.2	Non-Lead Frame
AMDLA1004S-2R2MT	2.2	20	15	20	5.8	6.7	Lead Frame
AMDLA1004S-3R3MT	3.3	20	11	17.5	10.5	11.8	Lead Frame
AMDLA1004S-4R7MT	4.7	20	8.8	15.2	15.8	19	Lead Frame
AMDLA1004S-5R6MT	5.6	20	8	14.1	19	22.8	Lead Frame
AMDLA1004S-6R8MT	6.8	20	7.8	12.2	22	24.5	Lead Frame
AMDLA1004S-8R2MT	8.2	20	7.6	9.5	25	28	Lead Frame
AMDLA1004S-100MT	10.0	20	7.5	8.6	27	30	Lead Frame
AMDLA1004S-150MT	15.0	20	6.25	7	41	45	Lead Frame
AMDLA1004S-220MT	22.0	20	5	6.2	58	66	Lead Frame
AMDLA1004S-330MT	33.0	20	4.4	5.5	84	91	Lead Frame
AMDLA1004S-470MT	47.0	20	3.5	4	125	143	Lead Frame
AMDLA1004S-680MT	68.0	20	2.6	3.2	184	210	Lead Frame
AMDLA1004S-820MT	82.0	20	2.3	3	240	270	Lead Frame
AMDLA1004S-101MT	100.0	20	2	2.7	270	310	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%

PART BUILDER

AMDLA1004S	—	1R0	M	T
Series		Inductance*	Tol. ¹	Packaging ²

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

2. Packaging: B = Bulk
T = Tape and Reel (500pcs/reel)

*Refer to Electrical Specification table

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

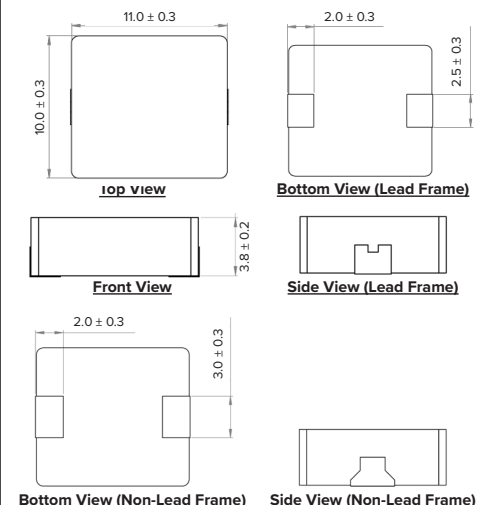
Core: Metal Alloy

Wire: Copper

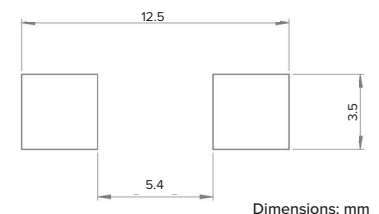
Terminal: Tin Plating

Ink: Black

PRODUCT DIMENSIONS

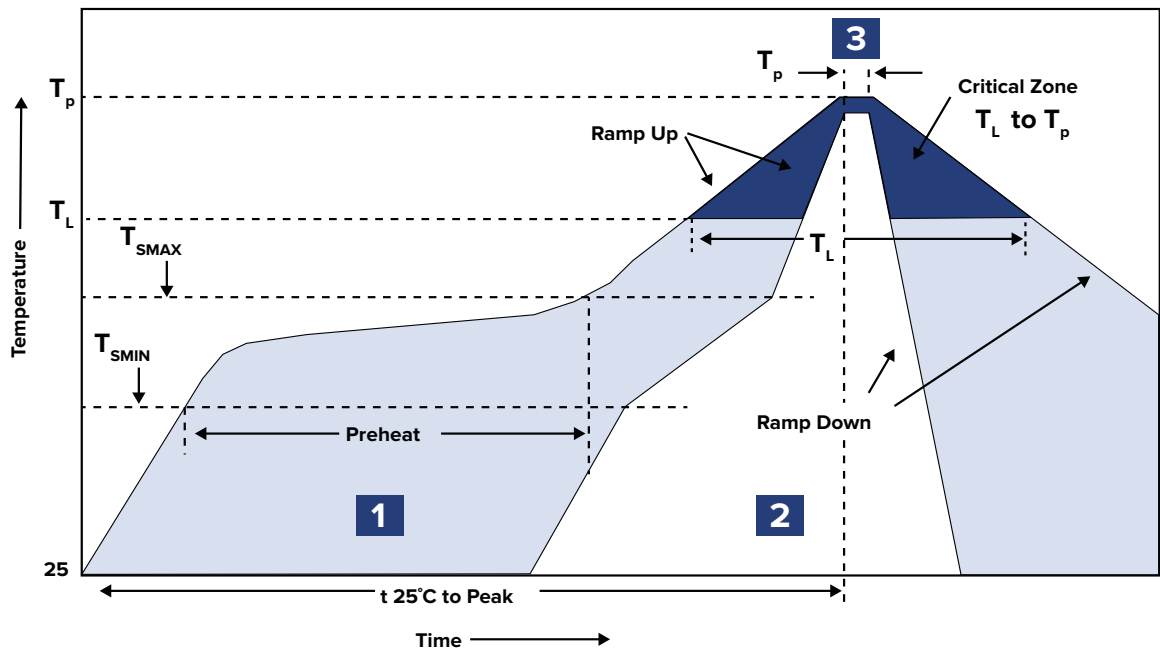


RECOMMENDED LANDING PATTERN



Dimensions: mm

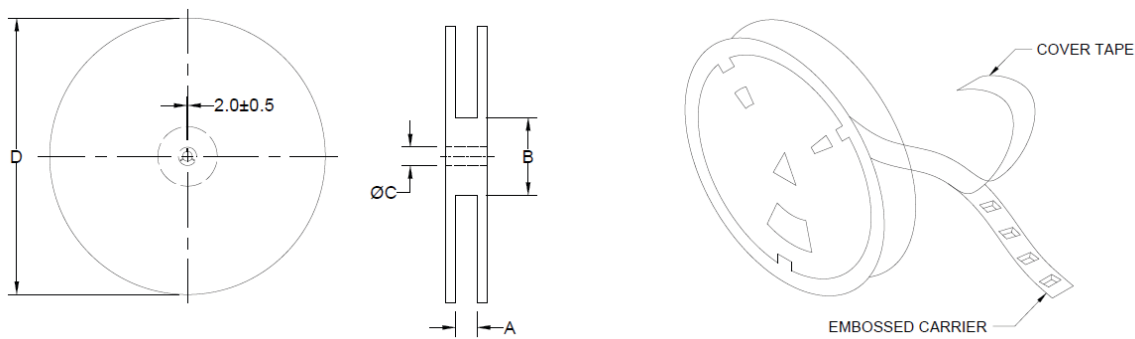
RECOMMENDED REFLOW PROFILE



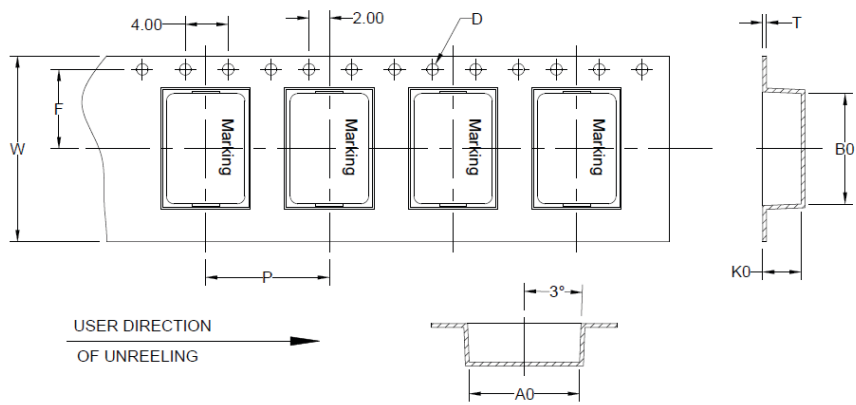
ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	$T_{smin} \sim T_{smax}$ 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak Heat	T_p 260°C	10 sec. MAX

PACKAGING

Tape and Reel: 500
Units per Carton: 4,000
T&R per Carton: 8
Weight per Carton: 13.9 kg
Weight per Unit: 2.2 g
Carton Dimensions: 410 x 325 x 415 mm



TYPE	A	B	C	D
13" x 24 mm	24.4 +2/-0	100.0 ± 2.0	13.5 +0.5/-0.2	330.0



B ₀	A ₀	K ₀	P	W	F	T	D
11.6 ± 0.1	10.4 ± 0.1	4.5 ± 0.1	16.0 ± 0.1	24.0 ± 0.3	11.5 ± 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.