

Request Samples



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ISO

9001:2015 CERTIFIED



#### **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	TOLERANCE	IRMS	ISAT	DC RESISTANCE (mΩ)		TYPE	
	(uH)	(%) (A) (A		(A)	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	

<sup>\*</sup> 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  $\Delta$  T of 40°C

Saturation Current: Current measured at  $\Delta$  L of 30%

## PART BUILDER



**1. Tolerance:** M = 20%

N = 30%

2. Packaging: B = Bulk

T = Tape and Reel (500pcs/reel)

## **GENERAL SPECIFICATIONS**

#### **Operating Temperature:**

-55°C to +155°C with (40°C rise) Irms

Maximum Part Temperature: +155°C **Components Storage Temperature:** 

-55°C to +125°C

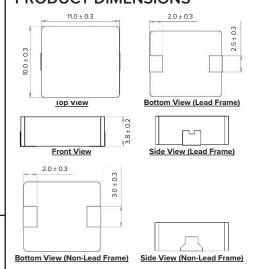
Tape and Reel Packaging Temperature:

-55°C to +80°C MSL: Level 1

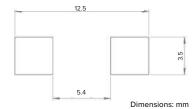
#### **MATERIALS**

Core: Metal Alloy Wire: Copper Terminal: Tin Plating Ink: Black

## PRODUCT DIMENSIONS



#### RECOMMENDED LANDING PATTERN

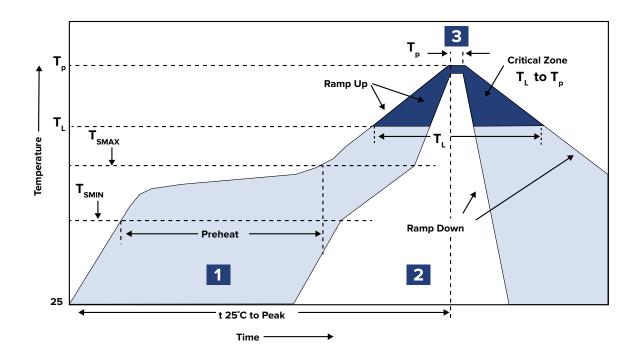




<sup>\*</sup>Refer to Electrical Specification table



## RECOMMENDED REFLOW PROFILE



ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	T <sub>smin</sub> ~ T <sub>smax</sub> 150°C ~ 200°C	60 <sup>~</sup> 180 sec.
2	Reflow	T <sub>L</sub> 217°C	60 <sup>~</sup> 150 sec.
3	Peak Heat	T <sub>P</sub> 260°C	10 sec. MAX



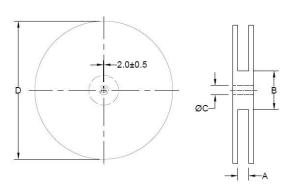


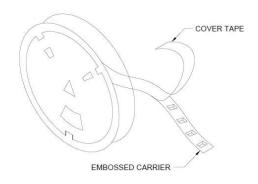
## **PACKAGING**

Tape and Reel: 500
Units per Carton: 4,000
T&R per Carton: 8

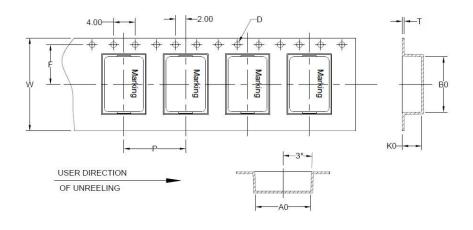
Weight per Carton: 13.9 kg Weight per Unit: 2.2 g

Carton Dimensions: 410 x 325 x 415 mm





TYPE	А	В	С	D
13" x 24 mm	24.4 +2/-0	100.0 ± 2.0	13.5 +0.5/-0.2	330.0



B <sub>o</sub>	$A_{o}$	K <sub>o</sub>	Р	W	F	Т	D
11.6 ± 0.1	$10.4 \pm 0.1$	$4.5 \pm 0.1$	$16.0 \pm 0.1$	$24.0 \pm 0.3$	11.5 ± 0.1	$0.35 \pm 0.05$	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.



Headquarters:

5101 Hidden Creek Ln Spicewood TX 78669 Phone: 512-371-6159 | Fax: 512-351-8858