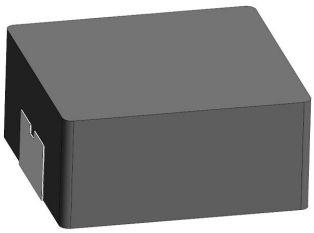
AMPLA1306S MOLDED INDUCTOR

ABRACON

Request Samples | Check Inventory



FEATURES

- Shielded construction
- Soft saturation
- High current density
- Designed for switching frequencies between 100KHz-2MHz
- Automotive option available upon request

ROHS COMPLIANT

ISO 9001:2015 CERTIFIED

ELECTRICAL SPECIFICATIONS @ 25°C

PART NUMBER*	INDUCTANCE (uH)	TOLERANCE (%)	IRMS (A)	ISAT (A)	DC RESISTANCE (mΩ)		TYPE
					TYP	MAX	
AMPLA1306S-R15MT	0.15	20	55	118.0	0.49	0.6	Lead Frame
AMPLA1306S-R22MT	0.22	20	53	112.0	0.47	0.6	Lead Frame
AMPLA1306S-R30MT	0.3	20	48	72.0	0.60	0.72	Lead Frame
AMPLA1306S-R33MT	0.33	20	46	68.0	0.65	0.8	Lead Frame
AMPLA1306S-R36MT	0.36	20	45	66.0	0.70	0.9	Lead Frame
AMPLA1306S-R40MT	0.4	20	44	64.0	0.70	1.0	Lead Frame
AMPLA1306S-R45MT	0.45	20	42	63.0	0.90	1.2	Lead Frame
AMPLA1306S-R47MT	0.47	20	41	63.0	0.90	1.2	Lead Frame
AMPLA1306S-R50MT	0.5	20	40	60.0	0.92	1.25	Lead Frame
AMPLA1306S-R56MT	0.56	20	37	58.0	1.05	1.2	Lead Frame
AMPLA1306S-R68MT	0.68	20	35	55.0	1.25	1.5	Lead Frame
AMPLA1306S-R82MT	0.82	20	33	50.0	1.50	1.9	Lead Frame
AMPLA1306S-1R0MT	1.0	20	30	48.0	1.70	2.3	Lead Frame
AMPLA1306S-1R5MT	1.5	20	27	45.0	2.50	3.0	Lead Frame
AMPLA1306S-1R8MT	1.8	20	24	40.0	3.60	4.0	Lead Frame
AMPLA1306S-2R2MT	2.2	20	22	37.0	3.80	4.2	Lead Frame
AMPLA1306S-2R7MT	2.7	20	20	32.0	4.30	5.5	Lead Frame
AMPLA1306S-3R3MT	3.3	20	18	30.0	5.70	6.8	Lead Frame
AMPLA1306S-4R7MT	4.7	20	13.5	28.0	7.0	8.4	Lead Frame
AMPLA1306S-5R6MT	5.6	20	12.5	23.0	8.5	10.0	Lead Frame
AMPLA1306S-6R8MT	6.8	20	11.5	18.0	9.5	11.5	Lead Frame
AMPLA1306S-7R0MT	7.0	20	11.2	17.7	10	12.3	Lead Frame
AMPLA1306S-8R2MT	8.2	20	10.5	16.0	12	15.5	Lead Frame
AMPLA1306S-100MT	10.0	20	10.0	15.5	13.2	16.5	Lead Frame
AMPLA1306S-120MT	12.0	20	9.5	14.0	16	20	Lead Frame
AMPLA1306S-130MT	13.0	20	9.0	13.0	21	24	Lead Frame
AMPLA1306S-150MT	15.0	20	9.0	12.5	23.2	28	Lead Frame
AMPLA1306S-220MT	22.0	20	9.0	12.0	32.5	37	Lead Frame
AMPLA1306S-330MT	33.0	20	8.0	11.0	48	58	Lead Frame
AMPLA1306S-470MT	47.0	20	6.5	9.5	76	90	Lead Frame
AMPLA1306S-101MT	100	20	2.5	3.5	180	200	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%

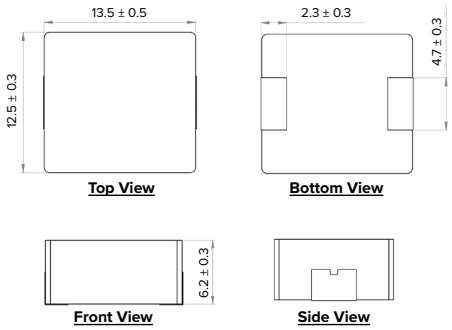
GENERAL SPECIFICATIONS

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: -55°C to +80°C
MSL: Level 1

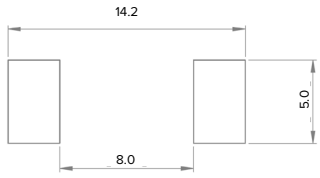
MATERIALS

Core: Carbonyl Powder
Wire: Copper
Terminal: Tin Plating
Ink: Black
Paint: Gray

PRODUCT DIMENSIONS



RECOMMENDED LANDING PATTERN



Dimensions: mm

PART BUILDER

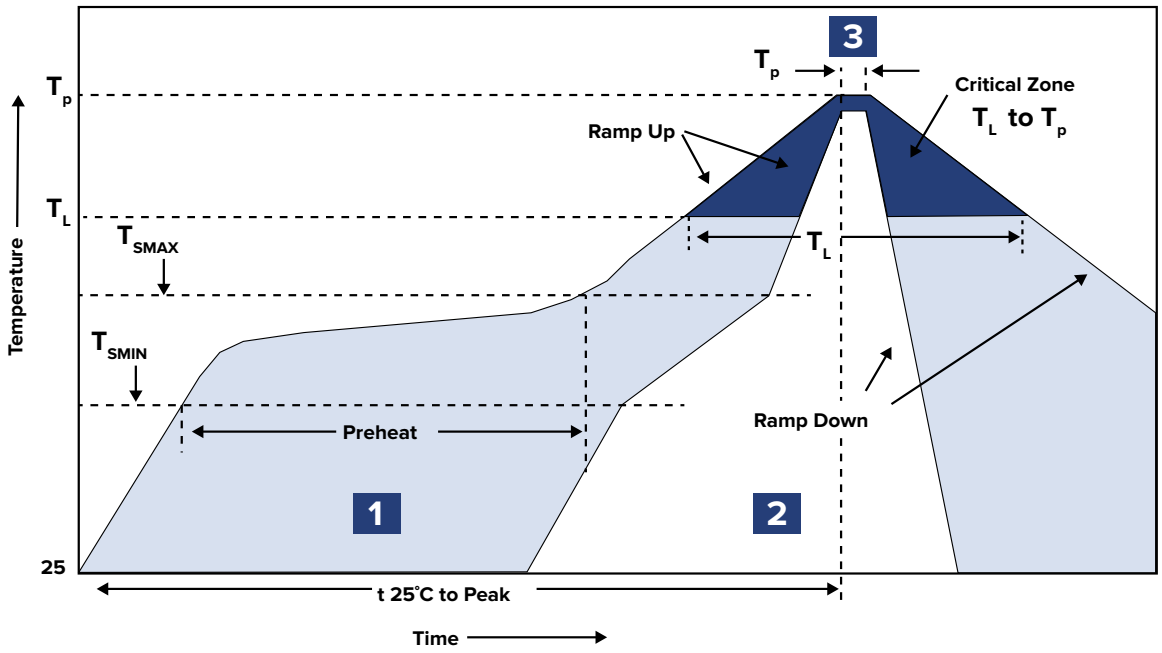
AMDLA1306S	–	1R0	M	T
Series		Inductance*	Tol. [1]	Packaging [2]

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

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

*Refer to Electrical Specification table

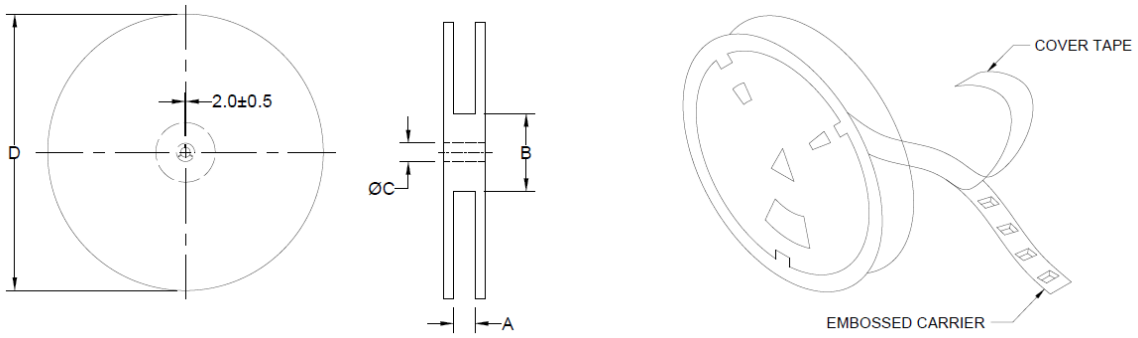
RECOMMENDED REFLOW PROFILE



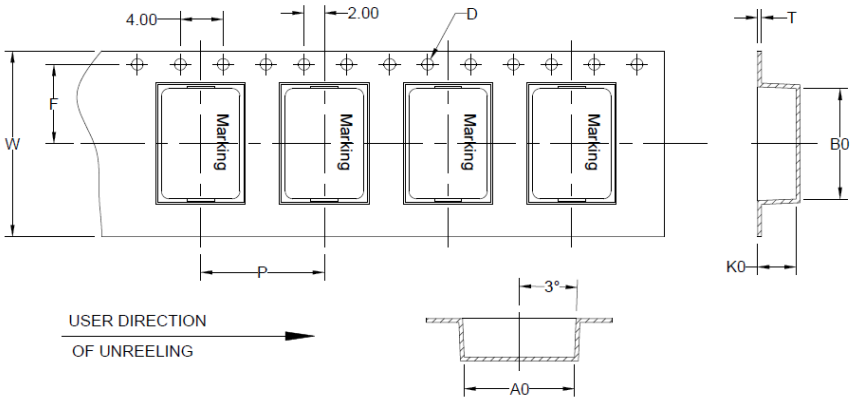
ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	T_{smin} ~ T_{smax} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak Heat	T_P 260°C	10 sec. MAX

PACKAGING

Tape and Reel: 500
Units per Carton: 4,000
T&R per Carton: 8
Weight per Carton: 29.1 kg
Weight per Unit: 6.0 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	13.0 +0.5/-0.2	330.0



B_0	A_0	K_0	P	W	F	T	D
14.1 ± 0.1	12.9 ± 0.1	7.0 ± 0.1	16.0 ± 0.1	24.0 ± 0.3	11.5 ± 0.1	0.35 ± 0.05	1.5

Dimensions: mm

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