AMPLA7030S 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	
AMPLA7030S-R10NT	0.10	30	32.5	60	1.2	1.7	Lead Frame
AMPLA7030S-R13NT	0.13	30	27.6	50	1.3	1.8	Lead Frame
AMPLA7030S-R15NT	0.15	30	27	45	1.5	1.9	Lead Frame
AMPLA7030S-R16NT	0.16	30	27	45	1.5	1.9	Lead Frame
AMPLA7030S-R18NT	0.18	30	25	43	1.7	2.3	Lead Frame
AMPLA7030S-R19NT	0.19	30	24	41	1.8	2.5	Lead Frame
AMPLA7030S-R20NT	0.20	30	24	41	1.8	2.5	Lead Frame
AMPLA7030S-R22NT	0.22	30	23	40	2.1	2.8	Lead Frame
AMPLA7030S-R25MT	0.25	20	21	39	3.3	3.5	Lead Frame
AMPLA7030S-R33MT	0.33	20	20	32	3.5	3.9	Lead Frame
AMPLA7030S-R36MT	0.36	20	19	32	3.6	4.2	Lead Frame
AMPLA7030S-R40MT	0.40	20	18	27.5	3.7	4.1	Lead Frame
AMPLA7030S-R47MT	0.47	20	17.5	26	4.0	4.2	Lead Frame
AMPLA7030S-R56MT	0.56	20	16.5	25.5	4.7	5.0	Lead Frame
AMPLA7030S-R60MT	0.60	20	16	25.5	4.7	5.2	Lead Frame
AMPLA7030S-R68MT	0.68	20	15.5	25	4.8	5.5	Lead Frame
AMPLA7030S-R75MT	0.75	20	14.5	24.5	5.5	6.6	Lead Frame
AMPLA7030S-R82MT	0.82	20	13	24	6.7	8	Lead Frame
AMPLA7030S-R90MT	0.90	20	11	22	8.3	10	Lead Frame
AMPLA7030S-1R0MT	1.0	20	11	22	8.3	10	Lead Frame
AMPLA7030S-1R2MT	1.2	20	10	20	10	12	Lead Frame
AMPLA7030S-1R5MT	1.5	20	9.0	18	13	15	Lead Frame
AMPLA7030S-1R8MT	1.8	20	8.5	16	14	17	Lead Frame
AMPLA7030S-2R0MT	2.0	20	8.2	15	16	19	Lead Frame
AMPLA7030S-2R2MT	2.2	20	8.0	14	18	20	Lead Frame
AMPLA7030S-2R5MT	2.5	20	7.0	13	20	22	Lead Frame
AMPLA7030S-2R7MT	2.7	20	7.0	13	24	27	Lead Frame
AMPLA7030S-3R3MT	3.3	20	6.0	13.5	28	30	Lead Frame
AMPLA7030S-4R7MT	4.7	20	5.5	10	37	40	Lead Frame
AMPLA7030S-5R6MT	5.6	20	5.0	9.0	43	48	Lead Frame
AMPLA7030S-6R8MT	6.8	20	4.5	8.0	54	60	Lead Frame
AMPLA7030S-8R2MT	8.2	20	4.0	7.5	64	68	Lead Frame
AMPLA7030S-100MT	10	20	3.5	6.0	75	85	Lead Frame
AMPLA7030S-120MT	12	20	3.3	5.5	81	93	Lead Frame
AMPLA7030S-150MT	15	20	3.0	4.0	107	123	Lead Frame
AMPLA7030S-180MT	18	20	2.5	4.0	140	160	Lead Frame
AMPLA7030S-220MT	22	20	2.0	3.5	165	190	Lead Frame
AMPLA7030S-330MT	33	20	2.0	2.5	200	240	Lead Frame
AMPLA7030S-470MT	47	20	1.75	2.0	302	363	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%

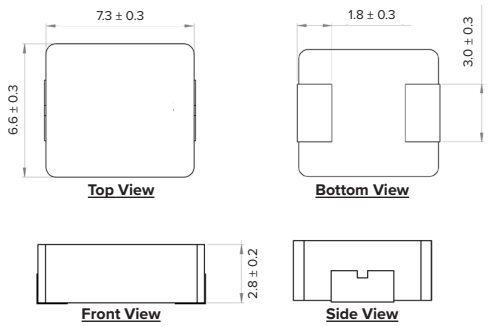
GENERAL SPECIFICATIONS

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
Not recommended for D.I. water wash

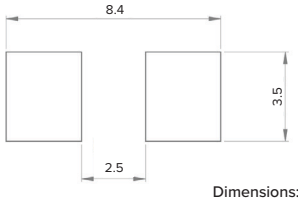
MATERIALS

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

PRODUCT DIMENSIONS



RECOMMENDED LANDING PATTERN



Dimensions: mm

PART BUILDER

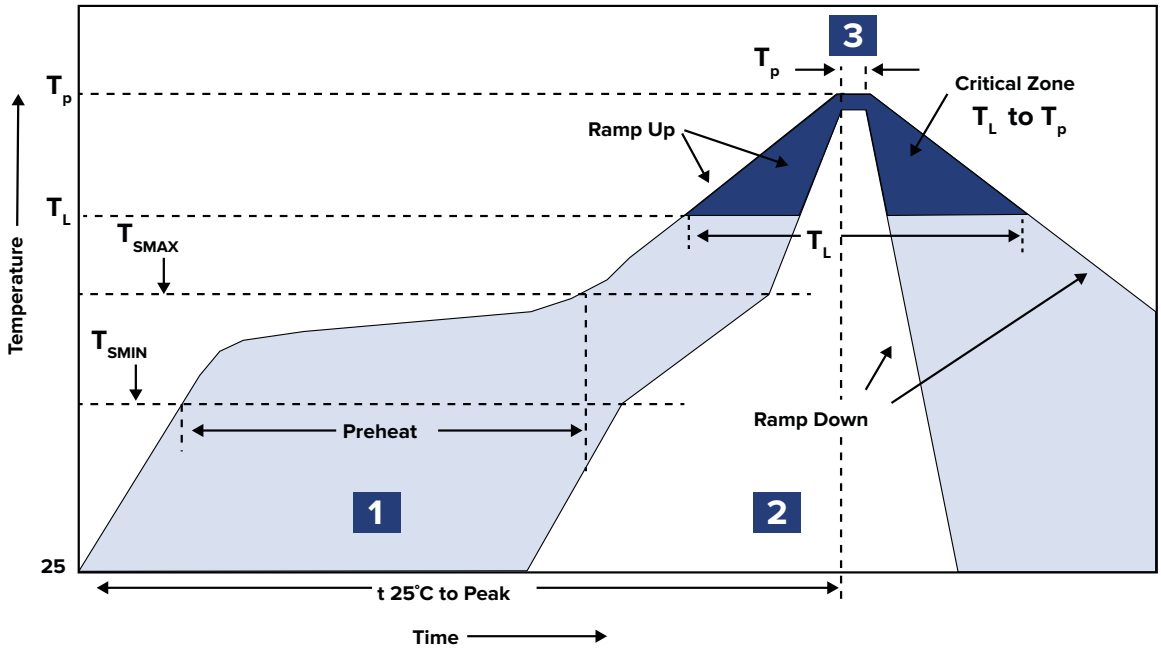
AMPLA7030S	–	1R0	M	T
Series		Inductance*	Tol. [1]	Packaging [2]

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

2. **Packaging:** B = Bulk
   T = Tape and Reel (1,000pcs/reel)

*Refer to Electrical Specification table

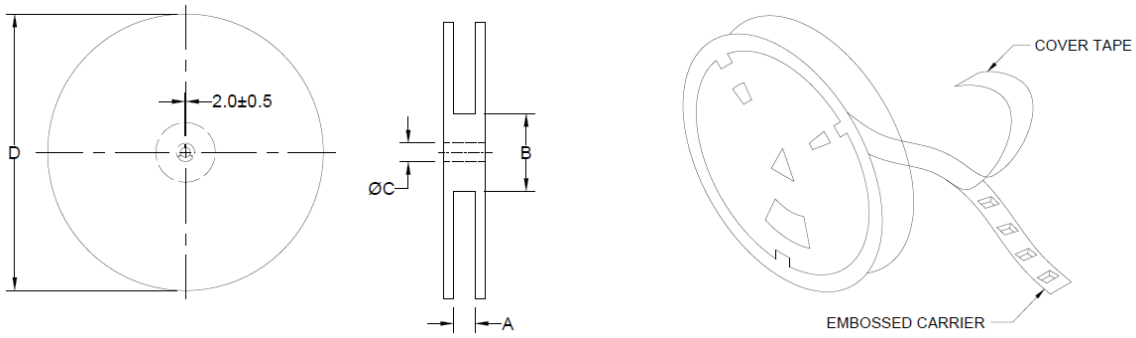
RECOMMENDED REFLOW PROFILE



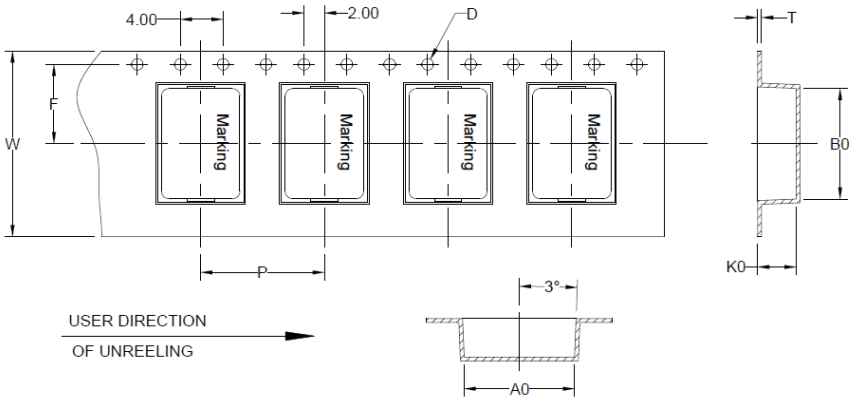
ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	T_{smin} ~ T_{smax} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak Heat	T_P 260°C	10 sec. MAX

PACKAGING

Tape and Reel:	1,000
Units per Carton:	8,000
T&R per Carton:	8
Weight per Carton:	11.1 kg
Weight per Unit:	0.75 g
Carton Dimensions:	410 x 325 x 415 mm



TYPE	A	B	C	D
13” x 16 mm	16.4 +2/-0	100 ± 2.0	13.0 +0.5/-0.2	330



B_0	A_0	K_0	P	W	F	T	D
7.7 ± 0.1	7.0 ± 0.1	3.3 ± 0.1	12.0 ± 0.1	16.0 ± 0.3	7.5 ± 0.1	0.35 ± 0.05	1.5 ± 0.1

Dimensions: mm

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