ASPI-1367-3R3M-T Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	ASPI-1367-3R3M-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	ASPI-1367-3R3M-T
Description	FIXED IND 3.3UH 15A 6.8 MOHM SMD
Detailed Description	3.3 µH Shielded Drum Core, Wirewound Inductor 15 A 6.8mOhm Max Nonstandard

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
ASPI-1367-3R3M-T	Abracon LLC
Series:	Product Status:
ASPI-1367	Active
Type:	Material - Core:
Drum Core, Wirewound	Ferrite
Inductance:	Tolerance:
3.3 µH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
15 A	29A
Shielding:	DC Resistance (DCR):
Shielded	6.8mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	-
Ratings:	Operating Temperature:
-	-40°C ~ 125°C
Inductance Frequency - Test:	Mounting Type:
200 kHz	Surface Mount
Package / Case:	Supplier Device Package:
Nonstandard	-
Size / Dimension:	Height - Seated (Max):
0.551" L x 0.508" W (14.00mm x 12.90mm)	0.264" (6.70mm)

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.4000	

Shielded SMD Chip Power Inductor

ASPI-1367

14.0 x 12.9 x 6.7mm
RoHS/RoHS Compliant

Features

- 100%lead (Pb) free.
- Lowest DCR/µH, in this package size.
- Frequency range up to 5.0 MHz
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction

Applications

- PDA/notebook/desktop/server applications
- Low profile, high current power supplie
- Battery powered devices
- DC/DC converter for Field Programmable Gate Array (FPGA)

Electrical Specifications

Operating Temperature:	-40˚C to +125˚C
Storage Temperature:	Less than +40˚C, 70% RH

Part Number ASPI-1367-	L (µH)	Tolerance (M)	R_{DC} (mΩ) Typ	R_{DC} (mΩ) Max	I_{sat} (A)	I_{rms} (A)	Lead Type*
R15	0.15	M	0.49	0.60	118.0	55.0	NLF
R22	0.22	M	0.47	0.60	112.0	53.0	NLF
R33	0.33	M	0.65	0.80	68.0	46.0	NLF
R47	0.47	M	0.90	1.20	63.0	41.0	NLF
R56	0.56	M	1.05	1.20	58.0	37.0	NLF
R68	0.68	M	1.25	1.50	55.0	35.0	NLF
1R0	1.00	M	1.70	2.30	48.0	30.0	NLF
1R5	1.50	M	2.50	3.00	45.0	27.0	NLF
2R2	2.20	M	3.80	4.00	37.0	22.0	LF
3R3	3.30	M	5.70	6.80	30.0	18.0	LF
4R7	4.70	M	7.00	8.40	28.0	13.5	LF
5R6	5.60	M	8.50	10.0	23.0	12.5	LF
6R8	6.80	M	9.50	11.5	18.0	11.5	LF
8R2	8.20	M	12.0	15.5	16.0	10.5	LF
100	10.0	M	13.2	16.5	15.5	10.0	LF
150	15.0	M	23.2	28	13.0	9.0	LF
220	22.0	M	32.5	37	12.0	9.0	LF
330	33.0	M	48	58	11.0	8.0	LF
470	47.0	M	76	90	9.5	6.5	LF
680	68.0	M	110	130	7.8	4.8	LF
101	100	M	145	165	5.5	4.2	LF

*Lead Type: NLF=Non-Leadframe, LF=Leadframe

ABRACON LLC
5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

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Shielded SMD Chip Power Inductor

ASPI-1367

14.0 x 12.9 x 6.7mm
RoHS/RoHS Compliant

Test Conditions

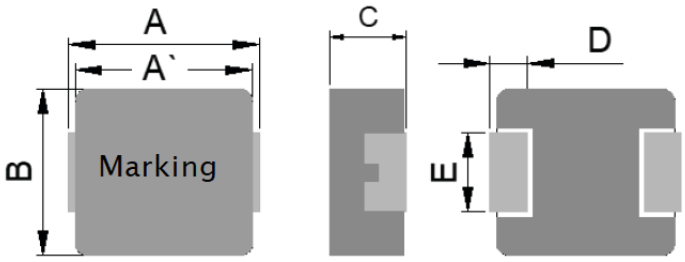
1. Inductance tested at 200kHz, 0.25V, 0A; Tolerance M=±20%
2. All test data is in reference to 25°C ambient.
3. Isat will cause the inductance value to drop approximately 30%
4. Irms will cause an approximate ΔT of 40°C
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Please contact Abracon for the availability of other inductance values.

Part Number Identification

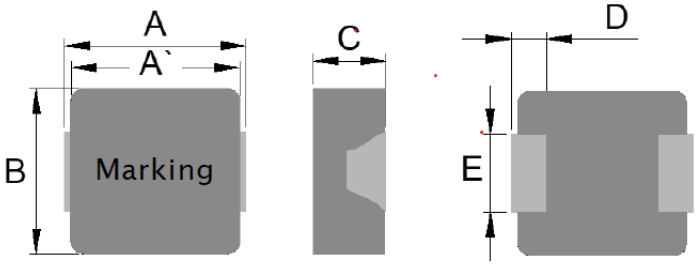
ASPI-1367-□□□ -□

Inductance Code	Tolerance	Packaging
Please refer to the Electrical Spec Table	M: ±20%	T: Tape and Reel (500pcs / reel)

Mechanical Information



Type: Leadframe (LF)



Type: Non-Leadframe (NLF)

A	A'	B	C	D	E
13.5 ±0.5	12.5 ±0.3	12.50 ±0.50	6.20 ±0.30	2.30 ±0.3	4.70 ±0.3

Dimensions: mm

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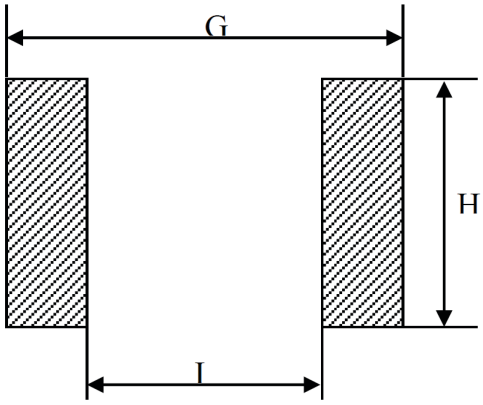
Mechanical Dimensions Cont.

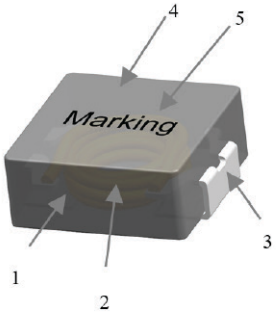
Recommended Land Pattern



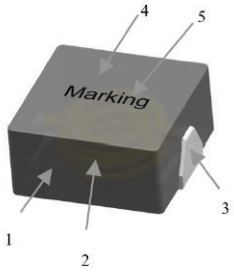
G	H	T
14.2 ref.	5.0 ref.	8.0 ref.

Dimensions: mm

Composition and Materials



Type: Leadframe



Type: Non-Leadframe

#	Material
1	Core
2	Wire
3	Leadframe: Clip
	Non-Leadframe: Solder Tab
4	Paint
5	Ink

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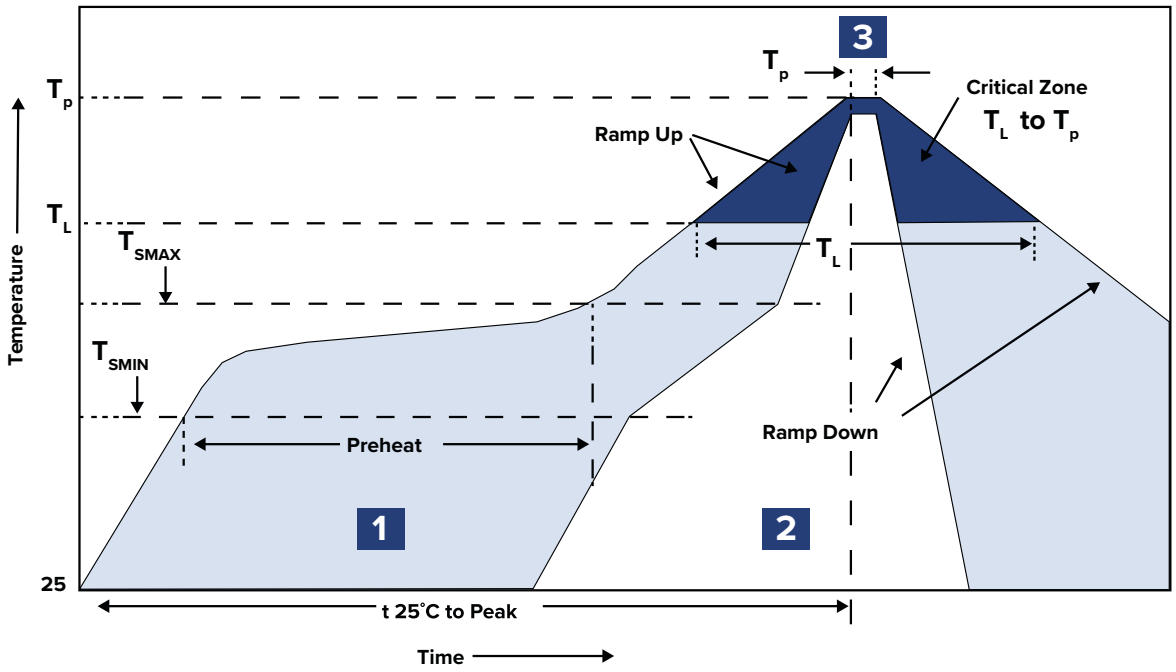
Reflow Profile



Zone	Description	Temperature	Time
1	Preheat / Soak	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

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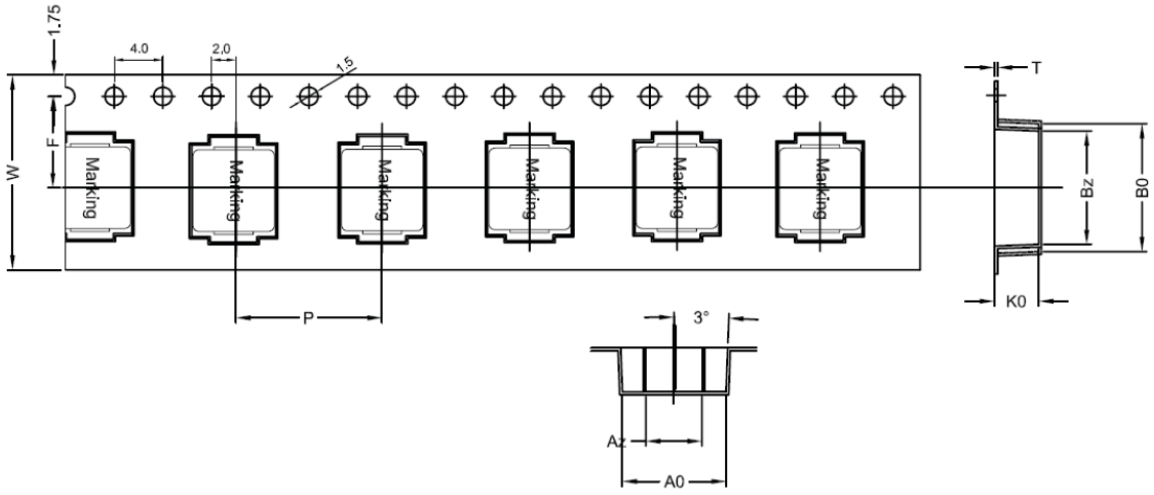
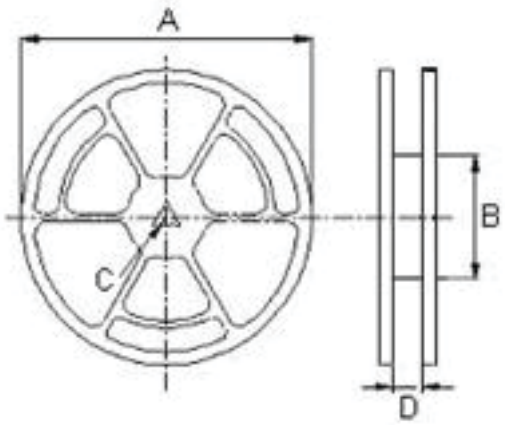
Packaging

T= Tape and Reel (500pcs/reel)



B_0	B_Z	A_0	A_Z	K_0	P	W	F	T
14.1±0.1	13.0±0.1	12.9±0.1	7.0±0.1	7.0±0.1	16.0±0.1	24±0.3	11.5±0.1	0.35±0.05



A	B	C	D
330	100 ±2	13.0 +0.5/-0.2	24.4 +2/-0

Dimensions: mm

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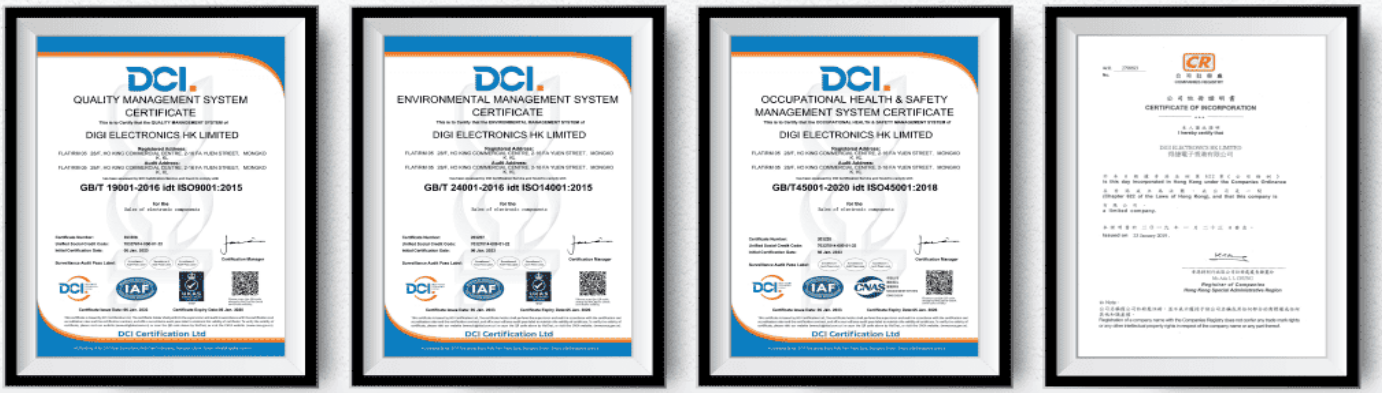

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