Engineering/Process Change Notice

ECN/PCN No.: M1104

For Manufacturer

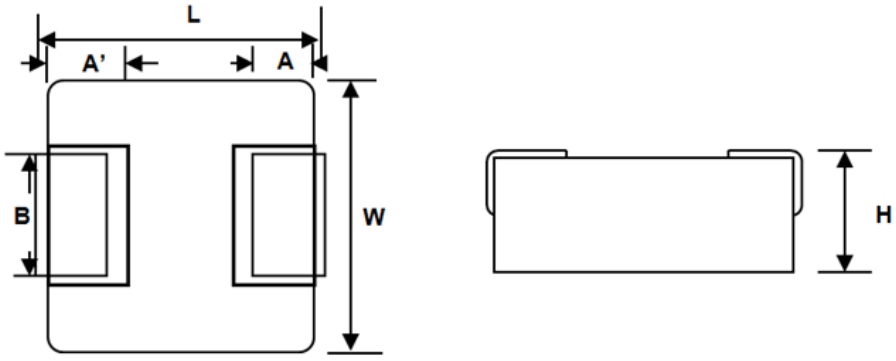
Product Description: Molding Type Power Inductor		**Abracon Part Number / Part Series:** ASPI-1040HI	☒Series ☐Part Number
Affected Revision: A	**New Revision:** B	**Application**	☐Safety ☒Non-Safety

Prior to Change:

1. Electrical Specifications

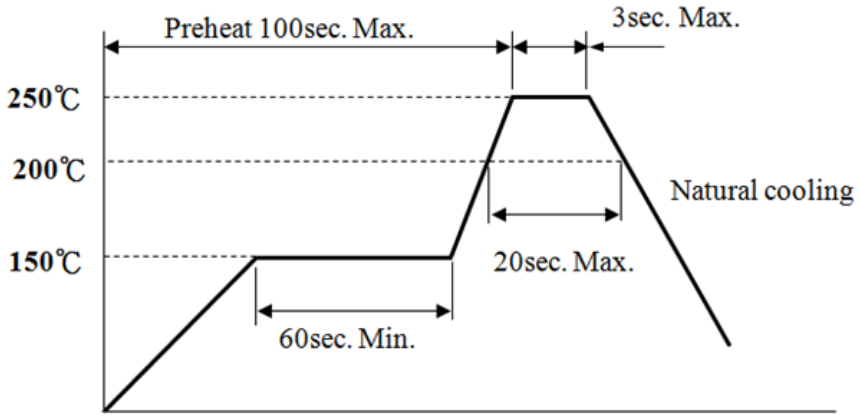
Part Number	Inductance	Tolerance	DCR Typ	DCR Max	Saturation Current	Temperature Rise Current
Units	µH	%	mΩ	mΩ	A	A
Symbol	L	M			Isat	Irms
ASPI-1040HI-R16	0.16	M	0.50	0.65	75.0	40.0
ASPI-1040HI-R22	0.22	M	0.88	0.96	68.0	35.0
ASPI-1040HI-R47	0.47	M	1.55	1.70	40.0	30.0
ASPI-1040HI-1R0	1.00	M	3.00	3.30	28.0	18.0
ASPI-1040HI-4R7	4.70	M	17.00	20.20	15.0	8.5
ASPI-1040HI-100	10.00	M	27.00	30.00	8.5	7.5

2. Production Dimensions



A	A'	B	L	W	H
2.0 ±0.5	2.5 ±0.1	3.0 ±0.5	11.15 ±0.35	10 ±0.3	4 max (4.0 ±0.25 for R16)

3. Reflow profile

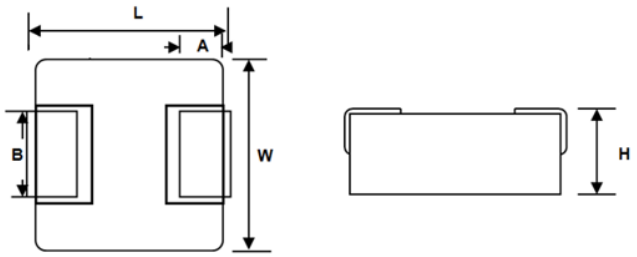


After Change:

1. Electrical Specifications

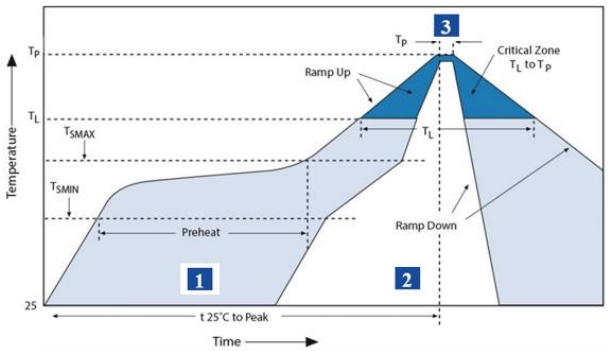
Part Number	Inductance	Tolerance	DCR Max	Saturation Current	Temperature Rise Current
Units	µH	%	mΩ	A	A
Symbol	L	M		Isat	Irms
ASPI-1040HI-R22	0.22	M	1.0	60	35
ASPI-1040HI-R30	0.3	M	1.1	45	35
ASPI-1040HI-R36	0.36	M	1.2	45	30
ASPI-1040HI-R47	0.47	M	1.7	40	30
ASPI-1040HI-R56	0.56	M	1.8	33	25
ASPI-1040HI-R68	0.68	M	2.4	30	23
ASPI-1040HI-R80	0.8	M	2.7	29	23
ASPI-1040HI-1R0	1	M	3.3	28	19
ASPI-1040HI-1R5	1.5	M	4.2	24	16
ASPI-1040HI-2R2	2.2	M	7.0	16.5	12
ASPI-1040HI-3R3	3.3	M	11.8	16	11
ASPI-1040HI-4R7	4.7	M	20	13	9
ASPI-1040HI-6R8	6.8	M	25	12	8.5
ASPI-1040HI-8R2	8.2	M	27	9	8
ASPI-1040HI-100	10	M	30	8.5	7.8
ASPI-1040HI-150	15	M	45	7	6.5
ASPI-1040HI-220	22	M	66	5.5	5
ASPI-1040HI-330	33	M	92	5	4.4
ASPI-1040HI-470	47	M	145	3.5	3.3
ASPI-1040HI-680	68	M	195	3	2.5

2. Production Dimensions



A	B	L	W	H
2.0 ±0.5	3.0 ±0.5	11.5 max	10 ±0.3	4 max

3. Reflow profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_L 230°C	40 sec.
3	Peak heat	T_P 250°C ± 5°C	10 sec. MAX

Cause/Reason for Change: Standard review and upgrade of product series.		
Change Plan	**Effective Date:** 10/23/2019	**Additional Remarks:** Please note the discontinuation of part number ASPI-1040HI-R16N-T.
Change Declaration: The changes listed do not negatively impact electrical or mechanical performance of this series. The visual appearance may differ due to slight alteration of metal alloy powder.		
Issued Date: 10/23/2019	**Issued By:** Matthew Deleon	**Issued Department:** Engineering
Approval: Syed Raza Engineering VP	**Approval:** Reuben Quintanilla Quality Manager	**Approval:** Ying Huang Purchasing Director

For Abracon EOL only

Last Time Buy (if applicable): N/A	**Alternate Part Number / Part Series:** N/A	
Additional Approval: N/A	**Additional Approval:** N/A	**Additional Approval:** N/A

Customer Approval (If Applicable)

Qualification Status:

☐ Approved

☐ Not accepted

Note: It is considered approved if there is no feedback from customer 1 month after ECN/PCN is released

Customer Part Number:	**Customer Project:**	
Company Name:	**Company Representative:**	**Representative Signature:**
Customer Remarks:		