

ECN/PCN No.: M1216

For Manufacturer			
Product Description: SMD Power Inductor	Abracon Part Number / Part Series: ASPI-0705	<input type="checkbox"/> Documentation only <input checked="" type="checkbox"/> ECN <input type="checkbox"/> EOL	<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number(s)
Affected Revision: B	New Revision: C	Application: <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety	

Prior to Change:

1.0 Key Electrical Specifications

PART NUMBER	INDUCTANCE (uH)	Tolerance	DCR (Ω) max	IDC (A) max	Inductance Code
ASPI-0705-100	10	K	0.07	2.30	100
ASPI-0705-120	12	K	0.08	2.00	120
ASPI-0705-150	15	K	0.09	1.80	150
ASPI-0705-180	18	K	0.10	1.60	180
ASPI-0705-220	22	K	0.11	1.50	220
ASPI-0705-270	27	K	0.12	1.30	270
ASPI-0705-330	33	K	0.13	1.20	330
ASPI-0705-390	39	K	0.16	1.10	390
ASPI-0705-470	47	K	0.18	1.10	470
ASPI-0705-560	56	K	0.24	0.94	560
ASPI-0705-680	68	K	0.28	0.85	680
ASPI-0705-820	82	K	0.37	0.78	820
ASPI-0705-101	100	K	0.43	0.72	101
ASPI-0705-121	120	K	0.47	0.66	121
ASPI-0705-151	150	K	0.64	0.58	151
ASPI-0705-181	180	K	0.71	0.51	181
ASPI-0705-221	220	K	0.96	0.49	221
ASPI-0705-271	270	K	1.11	0.42	271
ASPI-0705-331	330	K	1.26	0.40	331
ASPI-0705-391	390	K	1.77	0.36	391
ASPI-0705-471	470	K	1.96	0.34	471

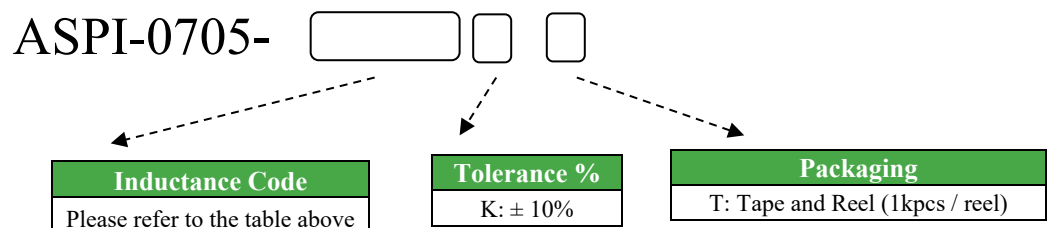
1.1 Operating Temperature

-40°C to +85°C

1.2 Storage Temperature

+5°C to +40°C

2.0 Part Number Identification



After Change:
2.0 Key Electrical Specifications

PART NUMBER	Inductance (uH)	Tolerance	Testing Condition	DCR (Ω) max	IDC (A) max	Inductance Code
ASPI-0705-1R0	1.0	M	100KHz, 0.25V	0.013	3.40	1R0
ASPI-0705-1R5	1.5	M	100KHz, 0.25V	0.016	3.30	1R5
ASPI-0705-1R8	1.8	M	100KHz, 0.25V	0.020	3.20	1R8
ASPI-0705-2R2	2.2	M	100KHz, 0.25V	0.023	3.00	2R2
ASPI-0705-2R5	2.5	M	100KHz, 0.25V	0.026	2.90	2R5
ASPI-0705-2R7	2.7	M	100KHz, 0.25V	0.027	2.85	2R7
ASPI-0705-3R3	3.3	M	100KHz, 0.25V	0.028	2.80	3R3
ASPI-0705-4R7	4.7	M	100KHz, 0.25V	0.045	2.70	4R7
ASPI-0705-5R6	5.6	M	100KHz, 0.25V	0.048	2.65	5R6
ASPI-0705-6R8	6.8	M	100KHz, 0.25V	0.058	2.50	6R8
ASPI-0705-8R2	8.2	M	100KHz, 0.25V	0.070	2.40	8R2
ASPI-0705-100	10	K, M	1KHz, 0.25V	0.070	2.30	100
ASPI-0705-120	12	K, M	1KHz, 0.25V	0.080	2.00	120
ASPI-0705-150	15	K, M	1KHz, 0.25V	0.090	1.80	150
ASPI-0705-180	18	K, M	1KHz, 0.25V	0.100	1.60	180
ASPI-0705-220	22	K, M	1KHz, 0.25V	0.110	1.50	220
ASPI-0705-270	27	K, M	1KHz, 0.25V	0.120	1.30	270
ASPI-0705-330	33	K, M	1KHz, 0.25V	0.130	1.20	330
ASPI-0705-390	39	K, M	1KHz, 0.25V	0.160	1.10	390
ASPI-0705-470	47	K, M	1KHz, 0.25V	0.180	1.10	470
ASPI-0705-560	56	K, M	1KHz, 0.25V	0.240	0.94	560
ASPI-0705-680	68	K, M	1KHz, 0.25V	0.280	0.85	680
ASPI-0705-820	82	K, M	1KHz, 0.25V	0.370	0.78	820
ASPI-0705-101	100	K, M	1KHz, 0.25V	0.430	0.72	101
ASPI-0705-121	120	K, M	1KHz, 0.25V	0.470	0.66	121
ASPI-0705-151	150	K, M	1KHz, 0.25V	0.640	0.58	151
ASPI-0705-181	180	K, M	1KHz, 0.25V	0.710	0.51	181
ASPI-0705-221	220	K, M	1KHz, 0.25V	0.960	0.49	221
ASPI-0705-271	270	K, M	1KHz, 0.25V	1.110	0.42	271
ASPI-0705-331	330	K, M	1KHz, 0.25V	1.260	0.40	331
ASPI-0705-391	390	K, M	1KHz, 0.25V	1.770	0.36	391
ASPI-0705-471	470	K, M	1KHz, 0.25V	1.960	0.34	471
ASPI-0705-561	560	K, M	1KHz, 0.25V	2.280	0.32	561
ASPI-0705-681	680	K, M	1KHz, 0.25V	2.480	0.30	681
ASPI-0705-821	820	K, M	1KHz, 0.25V	3.400	0.30	821
ASPI-0705-102	1000	K, M	1KHz, 0.25V	4.500	0.30	102
ASPI-0705-122	1200	K, M	1KHz, 0.25V	5.000	0.17	122
ASPI-0705-152	1500	K, M	1KHz, 0.25V	5.520	0.16	152

1.3 Test Conditions

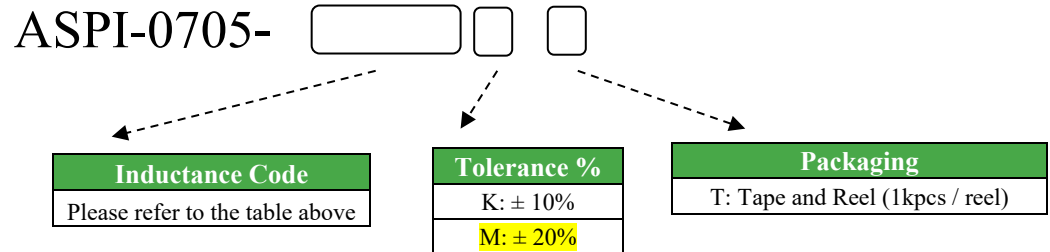
IDC max: $\Delta L/L$ (Initial) $\geq -10\%$ or $\Delta T=40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$), whichever is lower.

1.4 Operating Temperature

-40°C to +125°C

1.5 Storage Temperature

+15°C to +28°C,

3.0 Part Number Identification

Cause/Reason for Change:

Moving the series to a new production line, 17 new devices were added to the series, 'M' tolerance option for the original parts added, change in operating temperature range, testing conditions.

Change Plan

Effective Date: 2/10/2021	Additional Remarks:
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Change Declaration:

The change does not affect form fit or function of the series. Wider operating temperature, update to the testing conditions. 17 new devices in addition to 'M' tolerance option on original parts were added to the series.

Issued Date: 2/10/2021	Issued By: <i>Ahmed Alamin</i>	Issued Department: Engineering
Approval: <i>Syed Raza</i> Engineering VP	Approval: <i>Reuben Quintanilla</i> Quality Director	Approval: <i>Ying Huang</i> Purchasing Director

For Abracon EOL only

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

Customer Approval (If Applicable)

Qualification Status:		
<input type="checkbox"/> Approved <input type="checkbox"/> Not accepted		
<i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>		
Customer Part Number:	Customer Project:	
Company Name:	Company Representative:	Representative Signature:
Customer Remarks:		