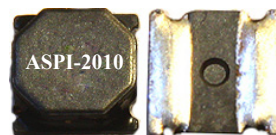


ECN/PCN No.: M1653

For Manufacturer			
Product Description: Wire Wound Magnetically Shielded SMD Power Inductor	Abracon Part Number / Part Series: ASPI-2010 Series	<input type="checkbox"/> Documentation only <input type="checkbox"/> ECN <input checked="" type="checkbox"/> EOL	<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number(s)
Affected Revision: Initial Release	New Revision: EOL	Application:	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
Prior to Change: Lifecycle status = Active			
After Change: Lifecycle status = EOL			
Cause/Reason for Change: As part of an effort to streamline our portfolio and better serve customers, we are discontinuing select products and offering a Last Time Buy period.			
Change Plan			
Effective Date: 11/27/2025	Additional Remarks:		
Change Declaration: Abracon products listed in this notice have been discontinued and are not recommended for new designs.			
Issued Date: 8/29/2025	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): 2/25/2026		Alternate Part Number / Part Series: AOTA-B201610S	
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: <div style="text-align: center;"> <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted </div> <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:			

Wire Wound Magnetically Shielded SMD Power Inductor



2.0 x 1.6 x 1.0 mm

ASPI-2010 series



RoHS/RoHS II Compliant

FEATURES:

- Small size and low profile: 1.0mm
- Small DCR and high rated current
- High reliability to mechanical stress
- Magnetically shielded by magnetic powder molding
- Suitable for RoHS reflow profile

APPLICATIONS:

- Mobile phones
- MP3 & 4 and other portable communication equipment
- Digital cameras.

ELECTRICAL SPECIFICATIONS:

Abracon P/N:	ASPI-2010 Series
Operating Temperature & Humidity :	-40°C ~ +125°C (including self heating)
Storage Temperature & Humidity:	-10°C ~ +40°C and 70% R.H. max.

Part Number ASPI-2010- Inductance Code	Inductance	L Tolerance	DC Resistance Typ	DC Resistance Max	Saturation Current Typ	Saturation Current Max	Temperature Rise Current Typ	Temperature Rise Current Max
Units	μH	—	Ω Typ	Ω Max	A Typ	A Max	A Typ	A Max
Symbol	L	M	DCR		Isat		Irms	
ASPI-2010-R47	0.47	M	0.049	0.059	2.30	2.85	2.35	2.60
ASPI-2010-R68	0.68	M	0.063	0.076	1.95	2.45	2.05	2.25
ASPI-2010-1R0	1.0	M	0.095	0.114	1.65	1.85	1.45	1.60
ASPI-2010-1R5	1.5	M	0.145	0.174	1.35	1.65	1.25	1.40
ASPI-2010-2R2	2.2	M	0.220	0.264	1.20	1.45	1.10	1.20
ASPI-2010-3R3	3.3	M	0.279	0.335	0.90	1.05	0.88	0.98
ASPI-2010-4R7	4.7	M	0.399	0.479	0.70	0.85	0.74	0.82
ASPI-2010-6R8	6.8	M	0.680	0.816	0.60	0.70	0.52	0.58

Test Conditions:

- Ambient Temperature: 20± 15°C
- Relative Humidity: 65%±20%
- Air Pressure: 86KPa to 106KPa

Inductance (L): WK3260B LCR meter or equivalent, 1MHz

Direct Current Resistance (DCR): HIOKI 3540 or equivalent

Saturation Current (Isat): WK3260B LCR meter or equivalent

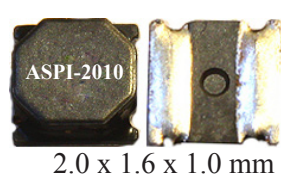
Isat: Based on inductance change ($\Delta L/L_0 \approx -30\%$)

Temperature rise current (Irms): Electric Power, Electric current meter, Thermometer

Irms: Based on temperature rise ($\Delta T : 40^\circ\text{C TYP.}$)



Wire Wound Magnetically Shielded SMD Power Inductor

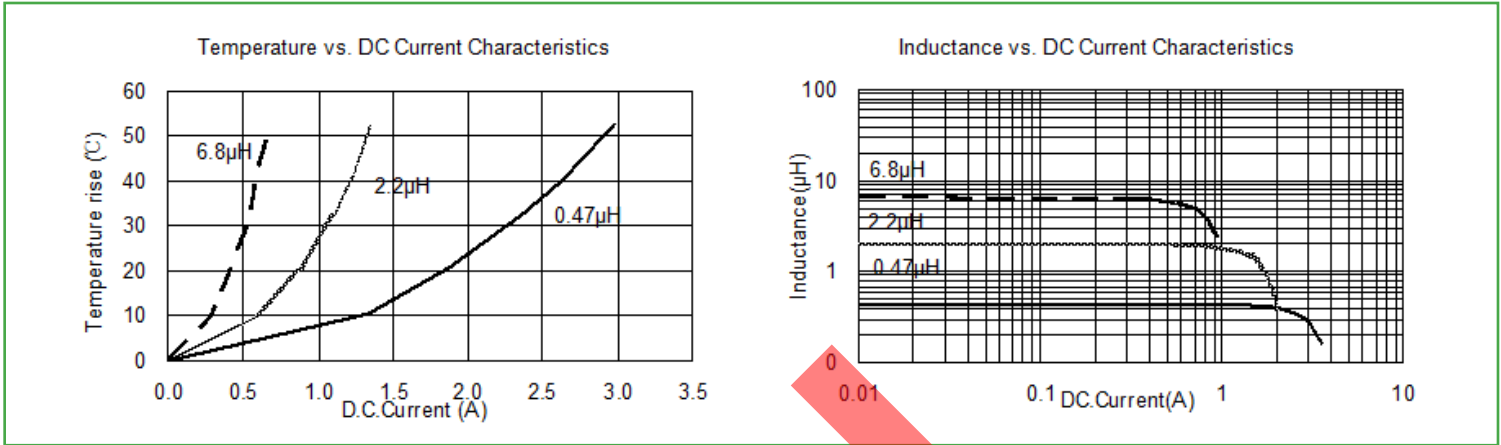


ASPI-2010 series

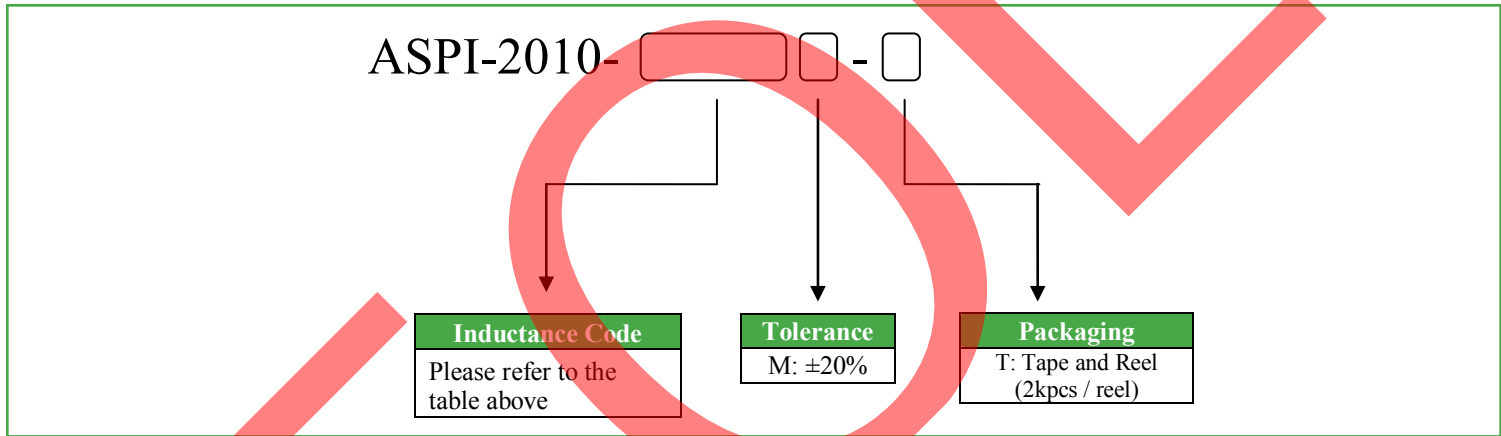


RoHS/RoHS II Compliant

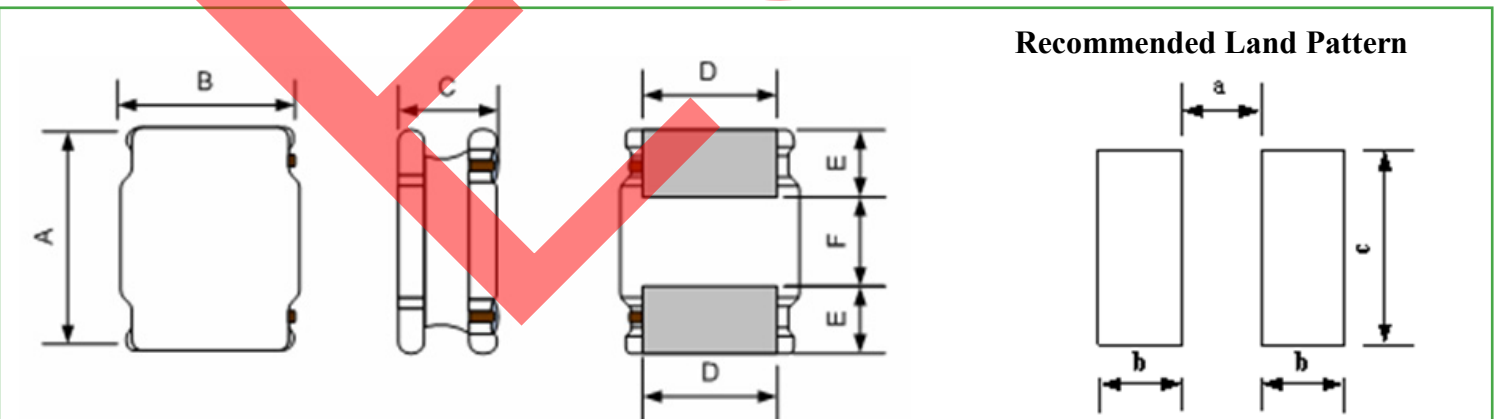
ELECTRICAL CHARACTERISTICS CURVES



PART IDENTIFICATION:



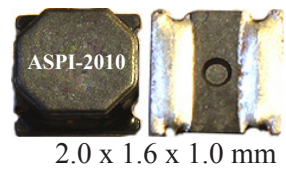
OUTLINE DIMENSION:



A	B	C Max.	D	E	F	a Typ.	b Typ.	c Typ.
2.0±0.2	1.6±0.2	1.0	1.2±0.2	0.60±0.2	0.80±0.2	0.70	0.70	1.70

Dimensions: mm

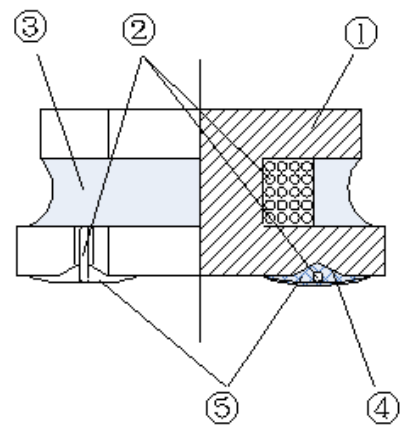
Wire Wound Magnetically Shielded SMD Power Inductor



ASPI-2010 series

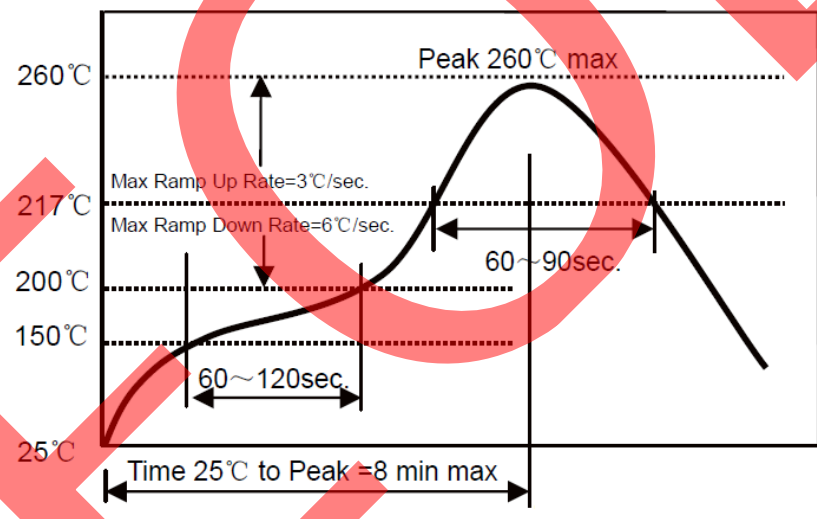
Pb RoHS/RoHS II Compliant

MATERIAL:



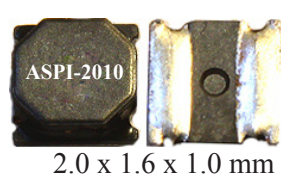
No	Components	Material
1	Ferrite Core	Ni-Zn Ferrite
2	Wire	Polyurethane System enameled copper wire
3	Magnetic Glue	Epoxy resin and magnetic powder
4	Plating Electrodes	Plating: Ag/Ni/Sn
5	Outer Electrodes	Top surface solder coating: Sn96.5%/Ag3%/Cu0.5%

REFLOW PROFILE:



- △ Preheat condition: 150 ~200°C /60~120sec.
- △ Allowed time above 217°C: 60~90sec.
- △ Max temp: 260°C
- △ Max time at max temp: 5sec.
- △ Solder paste: Sn/3.0Ag/0.5Cu
- △ Allowed Reflow time: 2x max

Wire Wound Magnetically Shielded SMD Power Inductor

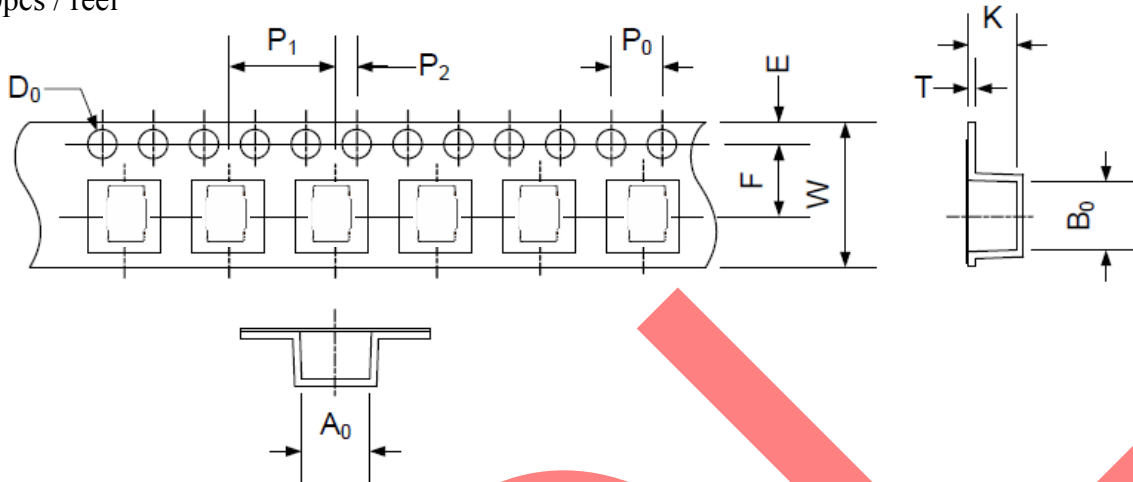


ASPI-2010 series

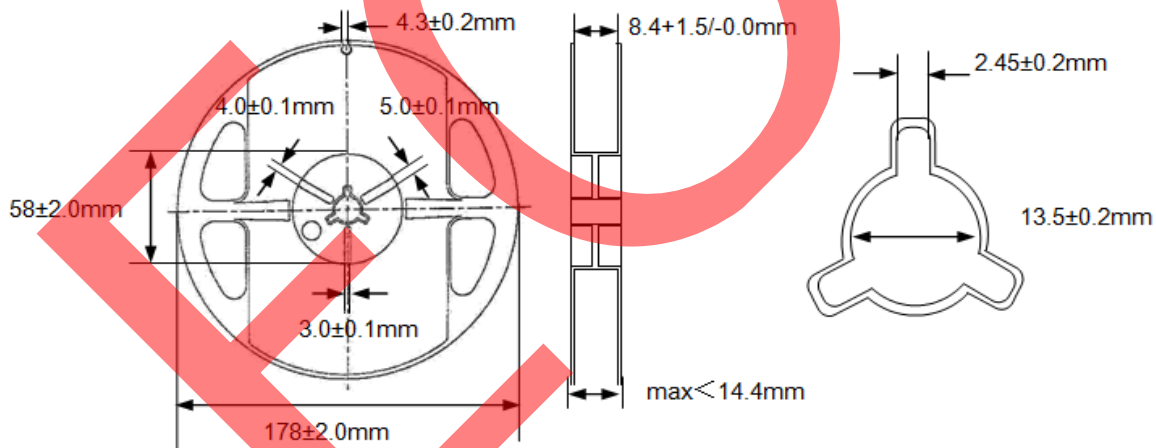
RoHS/RoHS II Compliant

TAPE & REEL:

T: 2,000pcs / reel



Ao	Bo	W	E	F	Po	P1	P2	D0	T	K
1.90±0.05	2.20±0.05	8.0±0.1	1.75±0.1	3.5±0.05	4.0±0.1	4.0±0.1	2.0±0.05	1.5+0.1/-0.0	0.25±0.02	1.20±0.05



Storage Conditions

- To maintain the solderability of terminal electrodes and to keep the packing material in good condition, temperature and humidity in the storage area should be controlled.
- Recommended conditions: -10°C ~ +40 °C, 70% RH (Max.)
- Even under ideal storage conditions, solderability of products electrodes may decrease as time passes. For this reason, product should be used within one year from the time of delivery.
- In case of storage over 6 months, solderability shall be checked before actual usage.

Dimension: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.



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