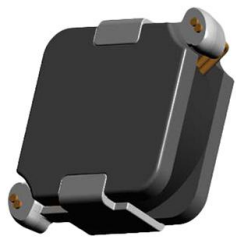


# ASPIAIG-H6530-8R2M-T Datasheet

[www.digi-electronics.com](http://www.digi-electronics.com)



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	ASPIAIG-H6530-8R2M-T-DG
Manufacturer	<a href="#">Abracon LLC</a>
Manufacturer Product Number	ASPIAIG-H6530-8R2M-T
Description	FIXED IND 8.2UH 4.4A 69 MOHM SMD
Detailed Description	8.2 $\mu$ H Shielded Drum Core, Wirewound Inductor 4.4 A 69mOhm Nonstandard



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

ASPIAIG-H6530-8R2M-T

Series:

ASPIAIG-H6530

Type:

Drum Core, Wirewound

Inductance:

8.2  $\mu$ H

Current Rating (Amps):

4.4 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

AEC-Q200

Inductance Frequency - Test:

100 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.280" L x 0.256" W (7.10mm x 6.50mm)

Manufacturer:

Abracon LLC

Product Status:

Obsolete

Material - Core:

Metal

Tolerance:

$\pm$ 20%

Current - Saturation (Isat):

4.5A

DC Resistance (DCR):

69mOhm

Frequency - Self Resonant:

13MHz

Operating Temperature:

-40°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.126" (3.20mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



## Engineering/Process Change Notice

**ECN/PCN No.: M1149**

For Manufacturer			
<b>Product Description:</b> Shielded SMD Power Inductor		<b>Abracon Part Number / Part Series:</b> ASPIAIG-H6530	
		<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number	
<b>Affected Revision:</b> A	<b>New Revision:</b> B	<b>Application</b>	
		<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety	
<b>Prior to Change:</b>			
<b>After Change:</b>			
EOL			
<b>Cause/Reason for Change:</b> No business activity			
<b>Change Plan</b>	<b>Effective Date:</b> Feb 14,2020	<b>Additional Remarks:</b> N/A	
<b>Change Declaration:</b>			
<b>Issued Date:</b> 02/19/2020			
For Abracon EOL only			
<b>Last Time Buy (if applicable):</b> last time buy date to April 15 <sup>th</sup> 2020.		<b>Alternate Part Number / Part Series:</b> N/A	
<b>Additional Approval:</b> N/A	<b>Additional Approval:</b> N/A	<b>Additional Approval:</b> N/A	

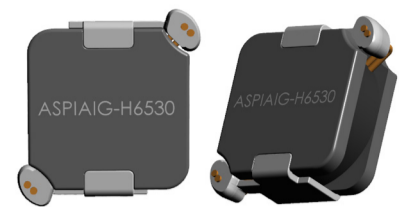


## Engineering/Process Change Notice

**ECN/PCN No.: M1150**

For Manufacturer			
<b>Product Description:</b> Shielded SMD Power Inductor		<b>Abracon Part Number / Part Series:</b> ASPIAIG-H8540	
		<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number	
<b>Affected Revision:</b> A	<b>New Revision:</b> B	<b>Application</b>	
		<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety	
<b>Prior to Change:</b>			
<b>After Change:</b>			
EOL			
<b>Cause/Reason for Change:</b> No business activity			
<b>Change Plan</b>	<b>Effective Date:</b> Feb 14,2020	<b>Additional Remarks:</b> N/A	
<b>Change Declaration:</b>			
<b>Issued Date:</b> 02/19/2020			
For Abracon EOL only			
<b>Last Time Buy (if applicable):</b> last time buy date to April 15 <sup>th</sup> 2020.		<b>Alternate Part Number / Part Series:</b> N/A	
<b>Additional Approval:</b> N/A	<b>Additional Approval:</b> N/A	<b>Additional Approval:</b> N/A	

# COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE



## ASPIAIG-HXXXX SERIES

ASPIAIG-H6530: 7.1 x 6.5 x 3.0 mm  
ASPIAIG-H8540: 8.8 x 8.5 x 4.0 mm

RoHS/RoHS II Compliant

MSL = 1

### FEATURES

- Low profile 3mm height for compact applications
- Advanced and high reliability wire-wound construction
- Shielded construction reduces EMI
- Automotive grade power inductor
- TS-16949 qualified production
- PPAP level 3 support
- AEC-Q200 qualified with -40°C to 125°C operation
- Low DCR down to 3.5mΩ improves efficiency
- High saturation current up to 32A
- Compact 7.1 x 6.5mm or 8.8 x 8.5mm options

### APPLICATIONS

- Height restricted applications
- Automotive body electronics and comfort system
- Automotive infotainment and entertainment
- Automotive navigation
- Transportation
- Lighting, LED ballasts
- Industrial Internet of Things (IIoT)
- Industrial applications
- Solar power
- DC/DC converters and switch mode power supplies

### STANDARD SPECIFICATIONS

Operating Temperature	-40°C ~ +125°C
Storage Condition	-10°C ~ +40°C and R.H. 70% max

Part Number	Inductance	Tolerance	Self-resonant	DC Resistance	Saturation Current	Temperature Rise Current
	100kHz/1V		Min	Max (25°C)	Typ	Typ
Units	μH	%	MHz	mΩ	A	A
Symbol	L	M	SRF	DCR	Isat	Irms
ASPIAIG-H6530-R22	0.22	20	108	4.0	25.00	20.00
ASPIAIG-H6530-R33	0.33	20	78	5.1	23.00	17.50
ASPIAIG-H6530-R47	0.47	20	71	6.6	22.50	15.50
ASPIAIG-H6530-R68	0.68	20	57	8.7	18.00	13.45
ASPIAIG-H6530-R75	0.75	20	55	8.7	15.80	13.45
ASPIAIG-H6530-1R0	1.0	20	41	8.7	13.00	13.45
ASPIAIG-H6530-1R5	1.5	20	37	13.8	11.50	8.50
ASPIAIG-H6530-2R2	2.2	20	24	18.0	8.60	8.00
ASPIAIG-H6530-3R3	3.3	20	23	30.5	6.60	7.00
ASPIAIG-H6530-4R7	4.7	20	15	43.5	5.30	5.40
ASPIAIG-H6530-6R8	6.8	20	14	64.0	4.50	4.50
ASPIAIG-H6530-8R2	8.2	20	13	69.0	4.50	4.40
ASPIAIG-H6530-100	10.0	20	12	77.4	4.45	4.20
ASPIAIG-H6530-150	15.0	20	11	127.0	4.25	3.50
ASPIAIG-H6530-220	22.0	20	8	177.0	2.40	2.80
ASPIAIG-H8540-R47	0.47	20	57	3.5	32.0	11.3
ASPIAIG-H8540-1R0	1.0	20	49	6.5	20.0	8.4
ASPIAIG-H8540-1R5	1.5	20	38	7.7	17.0	7.6
ASPIAIG-H8540-2R2	2.2	20	29	12.0	14.0	6.1
ASPIAIG-H8540-3R3	3.3	20	24	19.9	15.0	4.9
ASPIAIG-H8540-4R7	4.7	20	19	27.6	12.5	4.2
ASPIAIG-H8540-5R6	5.6	20	17	30.6	11.0	3.9
ASPIAIG-H8540-6R8	6.8	20	15	37.4	8.0	3.8
ASPIAIG-H8540-8R2	8.2	20	14	46.8	8.5	3.7
ASPIAIG-H8540-100	10.0	20	12	53.9	8.0	3.5
ASPIAIG-H8540-150	15.0	20	10	74.4	6.5	3.0
ASPIAIG-H8540-220	22.0	20	7	108.6	4.2	2.5
ASPIAIG-H8540-330	33.0	20	6	178.8	4.2	2.0

# COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE



ASPIAIG-HXXXX SERIES

ASPIAIG-H6530: 7.1 x 6.5 x 3.0 mm  
ASPIAIG-H8540: 8.8 x 8.5 x 4.0 mm

RoHS/RoHS II Compliant

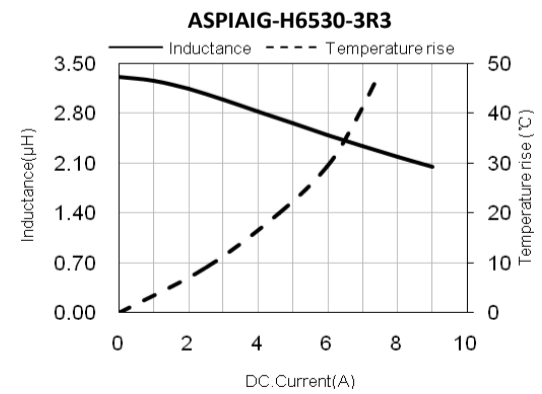
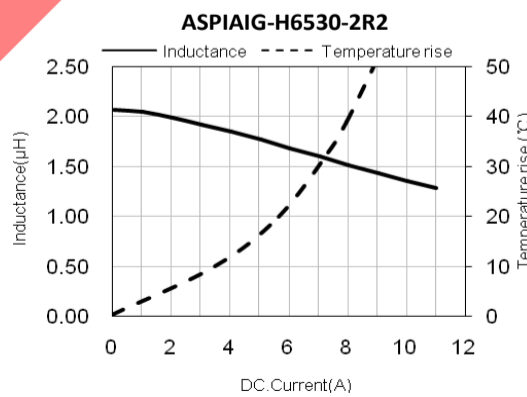
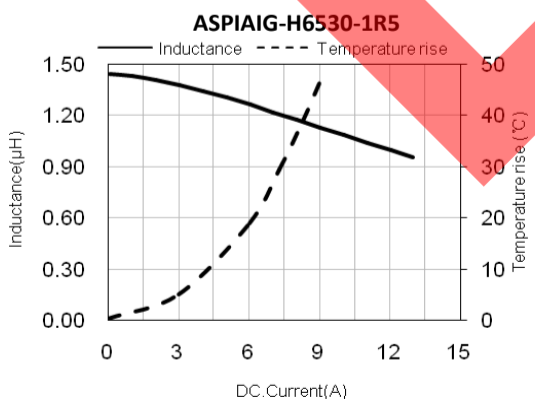
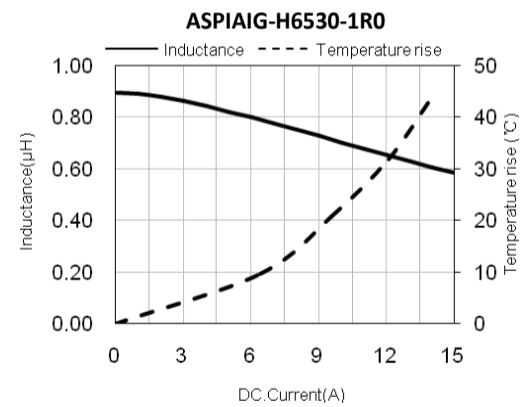
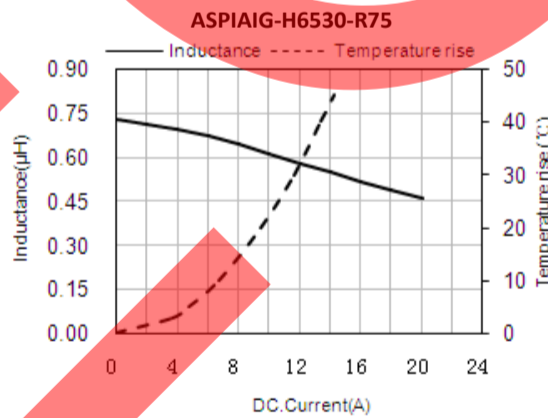
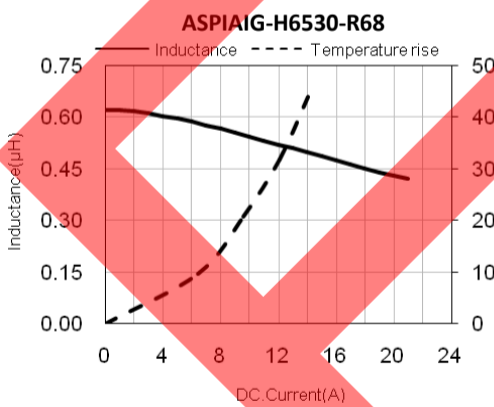
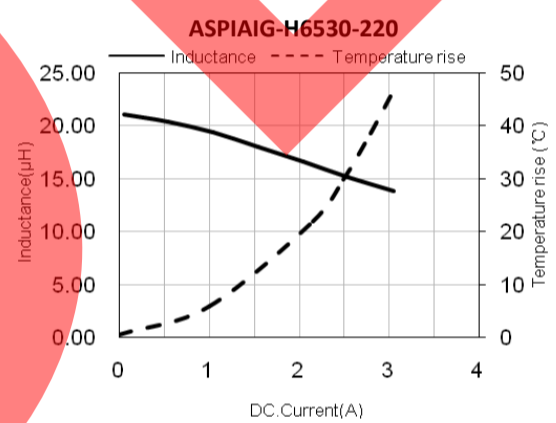
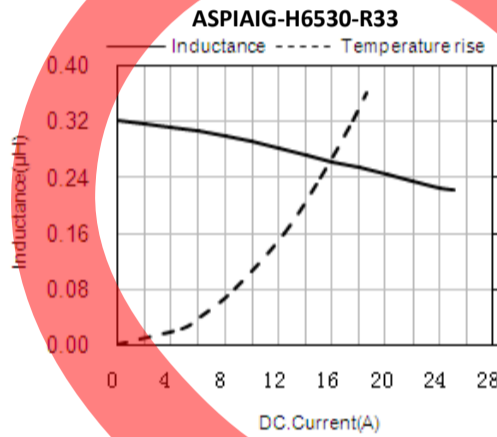
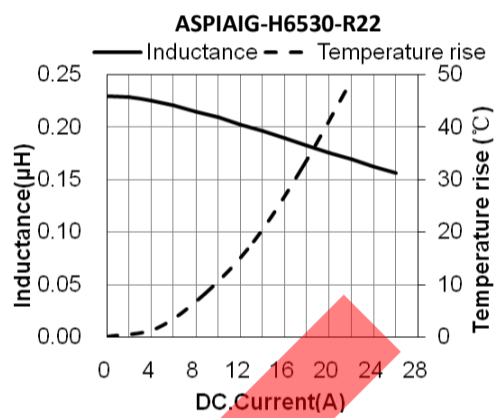
MSL = 1

## PART NUMBER IDENTIFICATION

ASPIAIG - H [ ] - [ ] [ ] - [ ]



## ELECTRICAL CHARACTERISTICS



# COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE



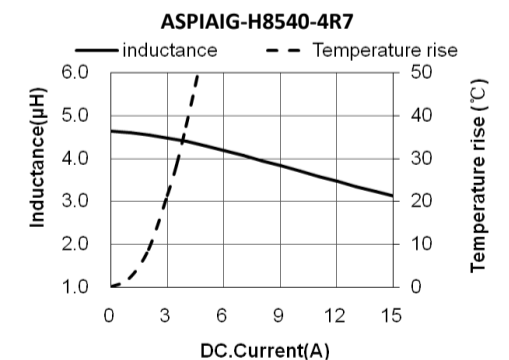
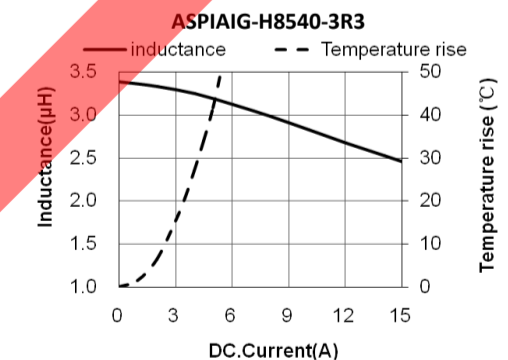
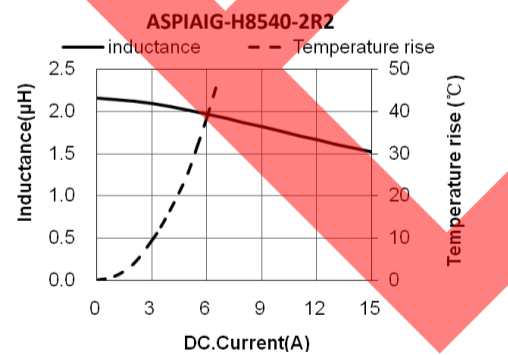
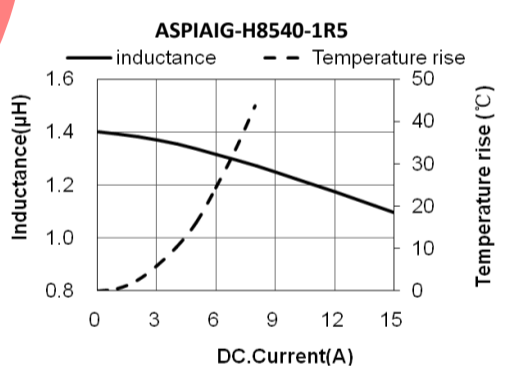
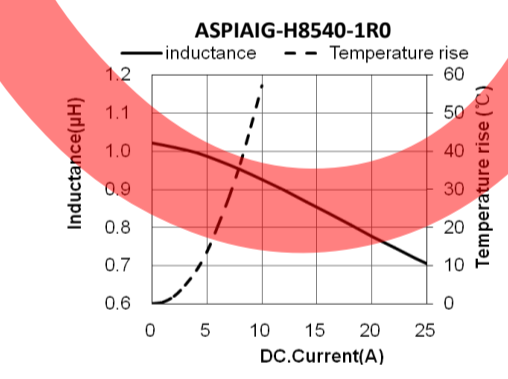
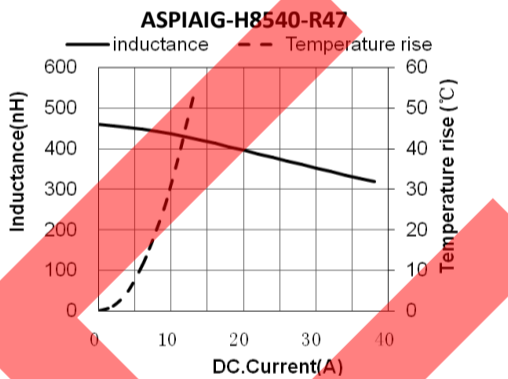
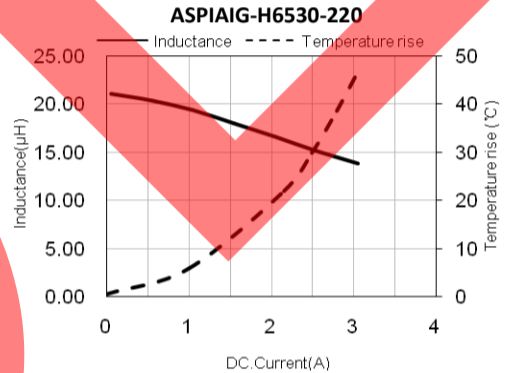
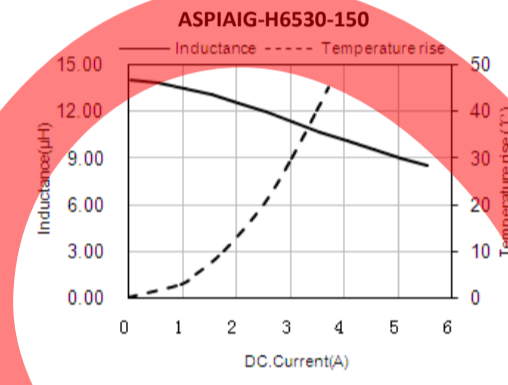
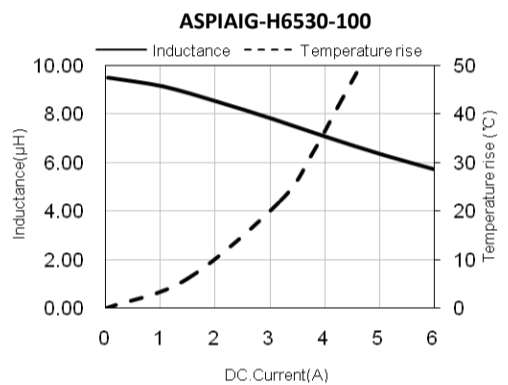
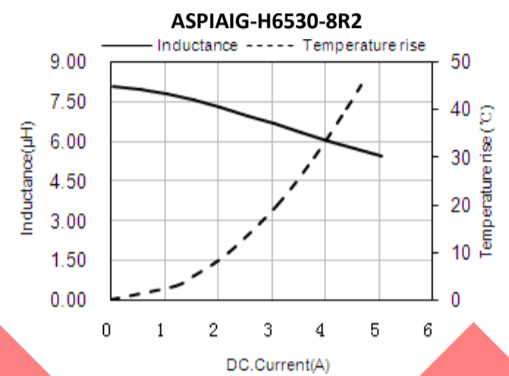
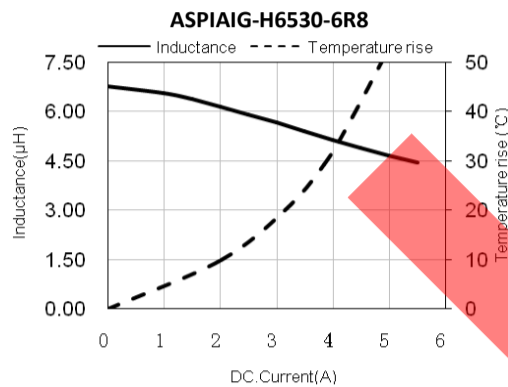
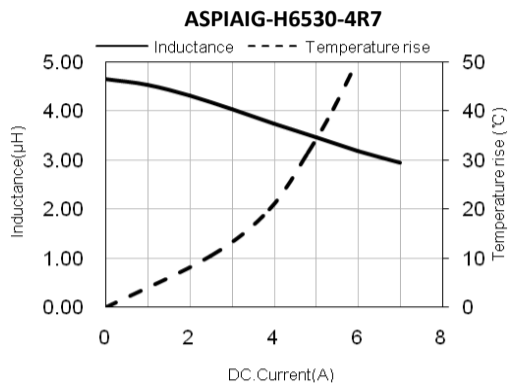
ASPIAIG-HXXXX SERIES

ASPIAIG-H6530: 7.1 x 6.5 x 3.0 mm  
ASPIAIG-H8540: 8.8 x 8.5 x 4.0 mm

RoHS/RoHS II Compliant

MSL = 1

## ELECTRICAL CHARACTERISTICS



# COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE



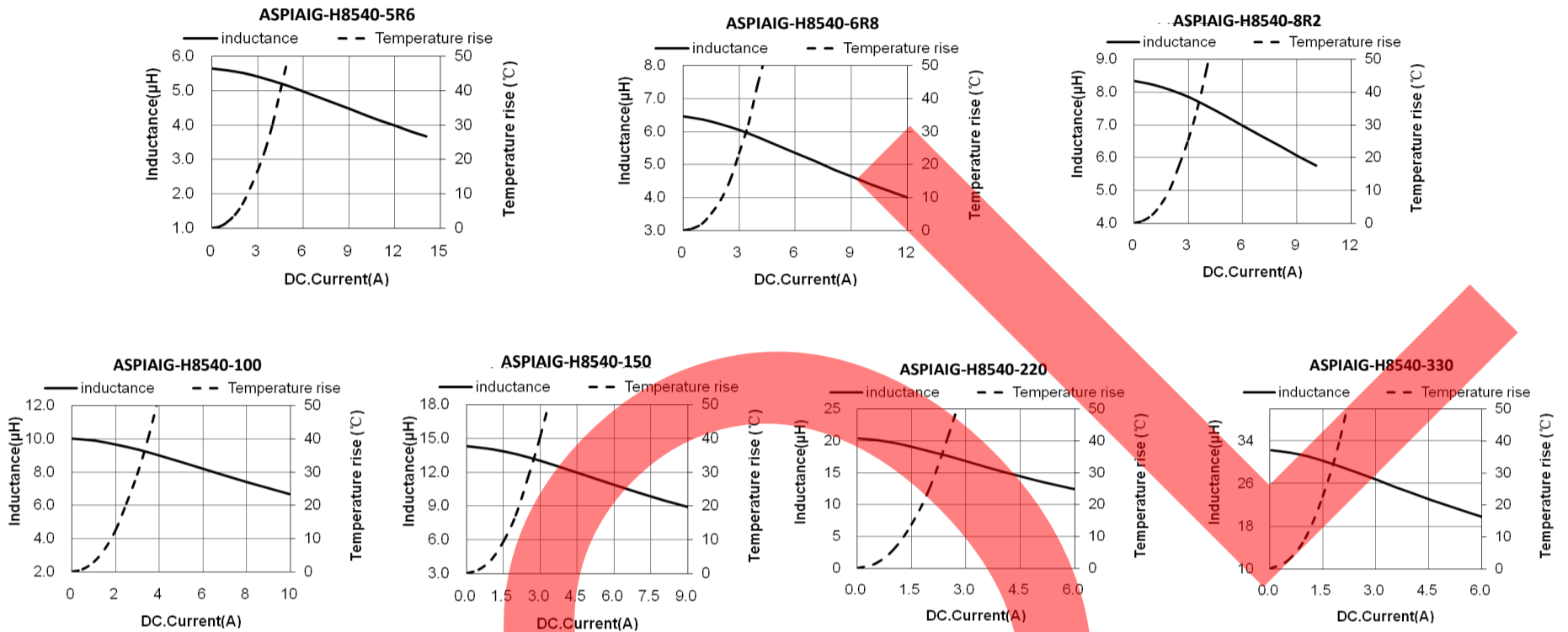
ASPIAIG-H6530: 7.1 x 6.5 x 3.0 mm  
 ASPIAIG-H8540: 8.8 x 8.5 x 4.0 mm

ASPIAIG-HXXXX SERIES

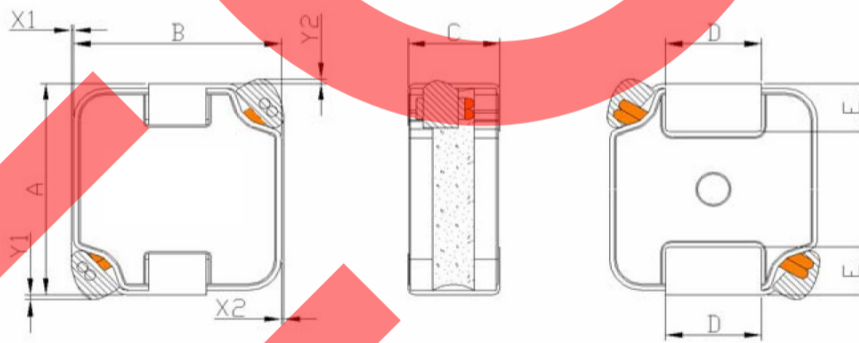
**Pb** RoHS/RoHS II Compliant

MSL = 1

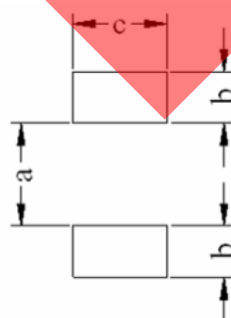
## ELECTRICAL CHARACTERISTICS



## MECHANICAL DIMENSIONS



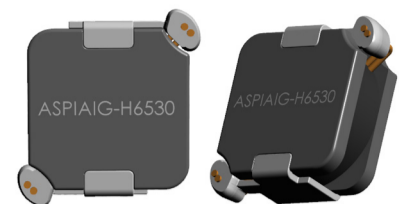
SERIES	A	B	C	D	E	X1	X2	Y1	Y2
ASPIAIG-H6530	7.1 ± 0.3	6.5 ± 0.3	3.0 ± 0.2	3.2 ± 0.3	1.55 ± 0.3			0.5 MAX	
ASPIAIG-H8540	8.5 ± 0.3	8.2 ± 0.3	4.0 MAX	3.9 ± 0.3	1.9 ± 0.3			0.5 MAX	



SERIES#	a Typ	b Typ	c Typ
ASPIAIG-H6530	3.7	1.85	3.4
ASPIAIG-H8540	3.8	2.4	4.1



# COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE



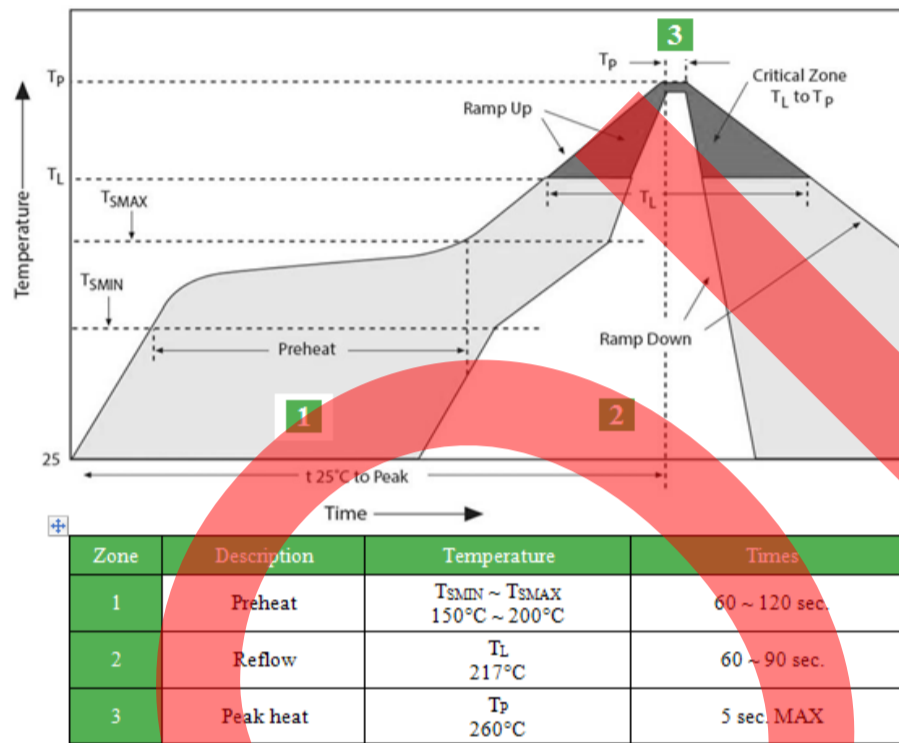
ASPIAIG-HXXXX SERIES

ASPIAIG-H6530: 7.1 x 6.5 x 3.0 mm  
ASPIAIG-H8540: 8.8 x 8.5 x 4.0 mm

RoHS/RoHS II Compliant

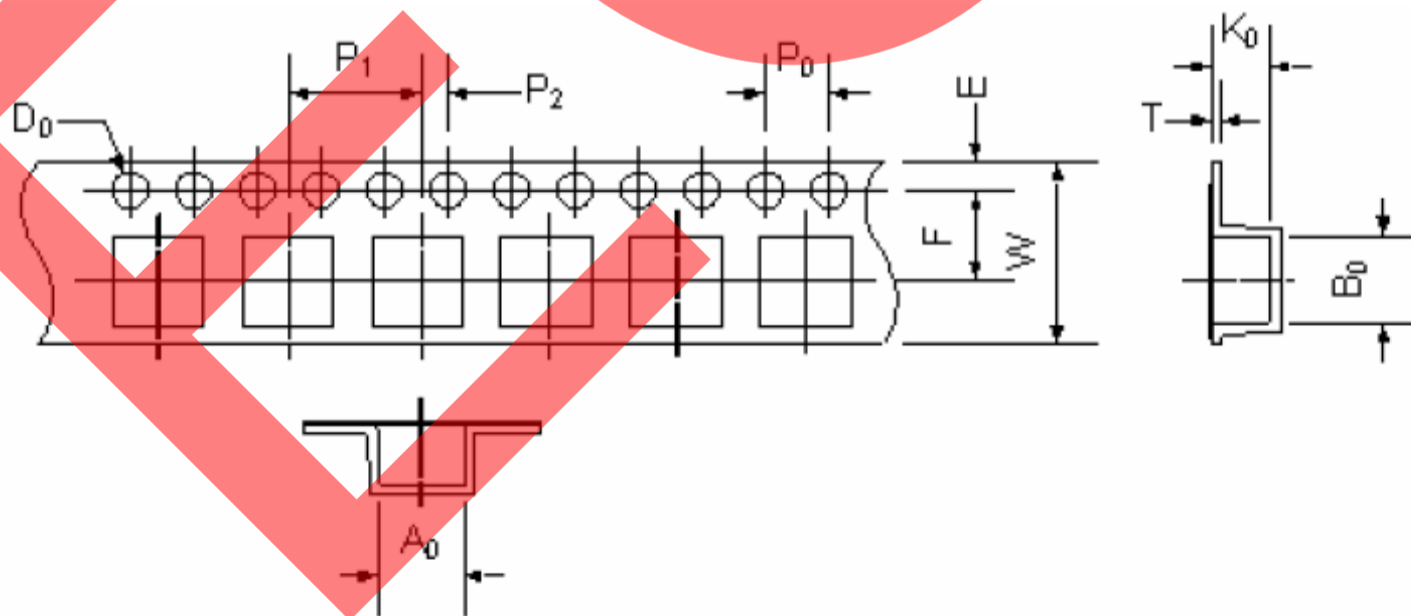
MSL = 1

## REFLOW PROFILE



## PACKAGING

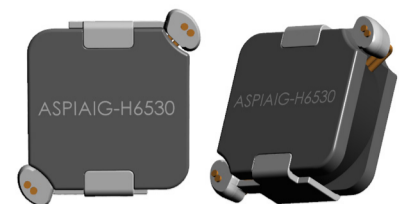
**TAPE AND REEL: 1000 PCS/REEL**



SERIES#	W	E	F	P0	P1	P2	D0	A0	B0	T	K0
ASPIAIG-H6530	16.0±0.3	1.75±0.1	7.5±0.1	4.0±0.1	12.0±0.1	2.0±0.1	1.5+0.1/-0.0	7.6±0.1	7.4±0.1	0.4±0.03	3.6±0.1
ASPIAIG-H8540	16.0±0.3	1.75±0.1	7.5±0.1	4.0±0.1	12.0±0.1	2.0±0.1	1.5+0.1/-0.0	8.9±0.1	8.6±0.1	0.5±0.05	4.2±0.1

# COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE

## ASPIAIG-HXXXX SERIES



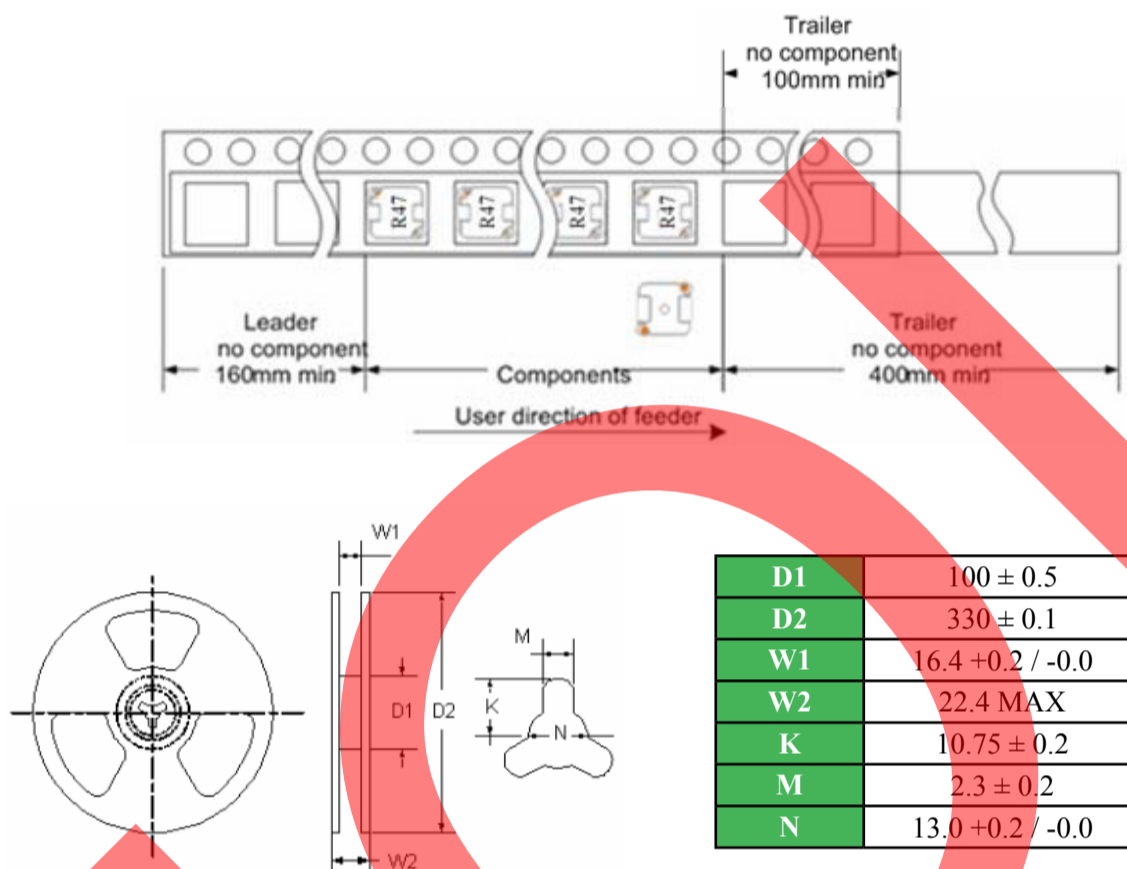
ASPIAIG-H6530: 7.1 x 6.5 x 3.0 mm  
ASPIAIG-H8540: 8.8 x 8.5 x 4.0 mm

 RoHS/RoHS II Compliant

MSL = 1

PACKAGING: DIRECTION OF ROLLING

Tape and Reel: 1000 pcs/reel



### NOTES

- The parts are manufactured in accordance with this specification. If other conditions and specifications which are required for this specification, please contact ABRACON for more information.
- ABRACON will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.
- In no case shall ABRACON be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.
- When changing your production process, please notify ABRACON immediately.
- ABRACON LLC'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.
- All specifications and Marking will be subject to change without notice.

## OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.