



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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AUTOMOTIVE GRADE MOLDED POWER INDUCTOR



ASPIAIG-F1x

11.0 x 10.0 x 3.8 mm
13.5 x 12.5 x 6.2 mm
MSL = 1

FEATURES

- PPAP ready and supported
- TS16949 production certified lines
- AEC-Q200 qualified
- Molded wire-wound construction with shielding
- High current up to 55A rms
- High saturation current up to 118A
- High inductance up to 82μH
- Low DCR down to 0.6mΩ
- Wide operating temperature range -40°C ~ +125°C

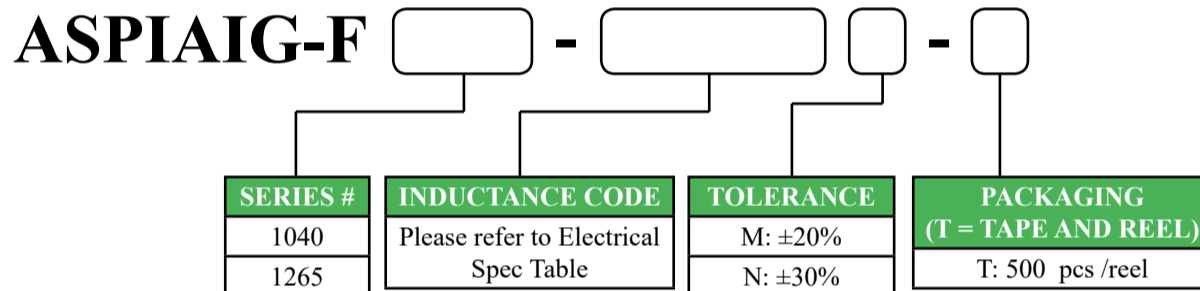
APPLICATIONS



RoHS/RoHS II Compliant

- Automotive and extended temperature industrial
- Body electronics and comfort system
- High current and high power applications
- Infotainment and entertainment
- Electric vehicles
- Lighting
- Solar inverters and power
- Industrial and robotics
- Medium and high power switch mode power supplies
- Point of load (POL) applications
- Motor control and motor drivers
- Heavy machinery and transportation

OPTIONS AND PART IDENTIFICATION



ELECTRICAL SPECIFICATIONS

OPERATING TEMPERATURE	STORAGE CONDITION
-40°C ~ +125°C	-10°C ~ +40°C and R.H. 70% max

PART NUMBER	INDUCTANCE	TOLERANCE	DC RESISTANCE	SATURATION CURRENT	TEMPERATURE RISE CURRENT	TYPE
	0.1MHz/0.1V		Max	Max	Typ	
UNITS	μH	%	mΩ	A	A	
SYMBOL	L	M, N	DCR	Isat	Irms	
ASPIAIG-F1040-R15	0.15	30%	0.6	75	43	Non-Lead Frame
ASPIAIG-F1040-R19	0.19	30%	0.9	70	36	Non-Lead Frame
ASPIAIG-F1040-R20	0.20	30%	0.95	70	35	Non-Lead Frame
ASPIAIG-F1040-R22	0.22	20%	1	60	35	Non-Lead Frame
ASPIAIG-F1040-R24	0.24	20%	1	60	34	Non-Lead Frame
ASPIAIG-F1040-R27	0.27	20%	1	60	33	Non-Lead Frame
ASPIAIG-F1040-R30	0.30	20%	1.1	60	32	Non-Lead Frame
ASPIAIG-F1040-R36	0.36	20%	1.2	60	31	Non-Lead Frame
ASPIAIG-F1040-R39	0.39	20%	1.3	60	30	Non-Lead Frame
ASPIAIG-F1040-R45	0.45	20%	1.5	45	29	Non-Lead Frame
ASPIAIG-F1040-R47	0.47	20%	1.5	43	28	Non-Lead Frame
ASPIAIG-F1040-R56	0.56	20%	1.8	40	25	Non-Lead Frame
ASPIAIG-F1040-R68	0.68	20%	2.7	39	22	Non-Lead Frame

REVISED: 06.14.2018



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For terms and conditions of sales visit:
www.abracon.com

ABRACON IS
ISO9001-2015
CERTIFIED

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ASPIAIG-F1x



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ELECTRICAL SPECIFICATIONS

RoHS/RoHS II Compliant

PART NUMBER	INDUCTANCE	TOLERANCE	DC RESISTANCE	SATURATION CURRENT	TEMPERATURE RISE CURRENT	TYPE
	0.1MHz/0.1V		Max	Max	Typ	
UNITS	μH	%	mΩ	A	A	
SYMBOL	L	M, N	DCR	Isat	Irms	
ASPIAIG-F1040-R75	0.75	20%	2.7	39	22	Non-Lead Frame
ASPIAIG-F1040-R88	0.88	20%	2.9	38	20	Non-Lead Frame
ASPIAIG-F1040-1R0	1.00	20%	3.3	36	18	Non-Lead Frame
ASPIAIG-F1040-1R2	1.20	20%	3.8	33	17	Non-Lead Frame
ASPIAIG-F1040-1R5	1.50	20%	4.6	33	16	Non-Lead Frame
ASPIAIG-F1040-1R8	1.80	20%	6.4	30	14	Lead Frame
ASPIAIG-F1040-2R2	2.20	20%	7	27	12	Lead Frame
ASPIAIG-F1040-2R5	2.50	20%	8.7	23	11.5	Lead Frame
ASPIAIG-F1040-3R0	3.00	20%	11.5	21	11.5	Lead Frame
ASPIAIG-F1040-3R3	3.30	20%	11.8	20	11	Lead Frame
ASPIAIG-F1040-3R9	3.90	20%	14.5	19	10.5	Lead Frame
ASPIAIG-F1040-4R0	4.00	20%	15	18	10.2	Lead Frame
ASPIAIG-F1040-4R7	4.70	20%	15.5	17	10	Lead Frame
ASPIAIG-F1040-5R6	5.60	20%	19.3	14	9	Lead Frame
ASPIAIG-F1040-6R2	6.20	20%	21.3	13.7	8.7	Lead Frame
ASPIAIG-F1040-6R5	6.50	20%	22.3	13.6	8.6	Lead Frame
ASPIAIG-F1040-6R8	6.80	20%	23.3	13.5	8.5	Lead Frame
ASPIAIG-F1040-7R3	7.30	20%	21.8	13	8.3	Lead Frame
ASPIAIG-F1040-8R2	8.20	20%	22.5	12.5	8	Lead Frame
ASPIAIG-F1040-100	10.0	20%	30	12	7.5	Lead Frame
ASPIAIG-F1040-150	15.0	20%	45	10	6.25	Lead Frame
ASPIAIG-F1040-180	18.0	20%	62	9	5.5	Lead Frame
ASPIAIG-F1040-220	22.0	20%	74	7	5	Lead Frame
ASPIAIG-F1040-270	27.0	20%	100	6	4	Lead Frame
ASPIAIG-F1040-330	33.0	20%	112	5	3.5	Lead Frame
ASPIAIG-F1040-470	47.0	20%	167	4.5	3	Lead Frame
ASPIAIG-F1040-680	68.0	20%	240	3	2	Lead Frame
ASPIAIG-F1040-820	82.0	20%	320	2.5	1.5	Lead Frame
ASPIAIG-F1265-R15	0.15	20%	0.6	118	55	Non-Lead Frame
ASPIAIG-F1265-R22	0.22	20%	0.6	112	53	Non-Lead Frame
ASPIAIG-F1265-R30	0.30	20%	0.72	72	48	Non-Lead Frame
ASPIAIG-F1265-R33	0.33	20%	0.8	68	46	Non-Lead Frame
ASPIAIG-F1265-R36	0.36	20%	0.9	66	45	Non-Lead Frame
ASPIAIG-F1265-R40	0.40	20%	1	64	44	Non-Lead Frame
ASPIAIG-F1265-R45	0.45	20%	1.2	63	42	Non-Lead Frame
ASPIAIG-F1265-R47	0.47	20%	1.2	63	41	Non-Lead Frame
ASPIAIG-F1265-R50	0.50	20%	1.25	60	40	Non-Lead Frame
ASPIAIG-F1265-R56	0.56	20%	1.2	58	37	Non-Lead Frame

AUTOMOTIVE GRADE MOLDED POWER INDUCTOR



ASPIAIG-F1x

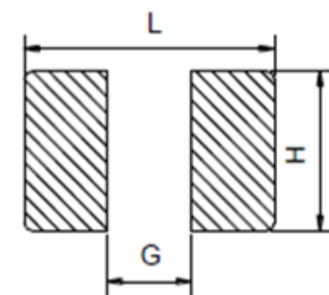
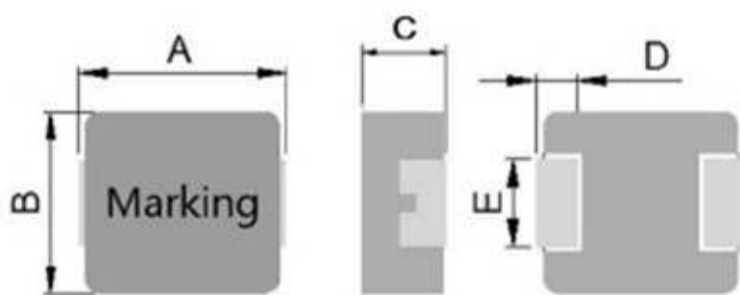
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RoHS/RoHS II Compliant

ELECTRICAL SPECIFICATIONS

PART NUMBER	INDUCTANCE	TOLERANCE	DC RESISTANCE	SATURATION CURRENT	TEMPERATURE RISE CURRENT	TYPE
	0.1MHz/0.1V		Max	Max	Typ	
UNITS	μ H	%	m Ω	A	A	
SYMBOL	L	M, N	DCR	Isat	Irms	
ASPIAIG-F1265-R68	0.68	20%	1.5	55	35	Non-Lead Frame
ASPIAIG-F1265-R82	0.82	20%	1.9	50	33	Non-Lead Frame
ASPIAIG-F1265-1R0	1.00	20%	2.3	48	30	Non-Lead Frame
ASPIAIG-F1265-1R5	1.50	20%	3	45	27	Non-Lead Frame
ASPIAIG-F1265-1R8	1.80	20%	4	40	24	Lead Frame
ASPIAIG-F1265-2R2	2.20	20%	4.2	37	22	Lead Frame
ASPIAIG-F1265-3R3	3.30	20%	6.8	30	18	Lead Frame
ASPIAIG-F1265-4R7	4.70	20%	8.4	28	13.5	Lead Frame
ASPIAIG-F1265-5R6	5.60	20%	10	23	12.5	Lead Frame
ASPIAIG-F1265-6R8	6.80	20%	11.5	18	11.5	Lead Frame
ASPIAIG-F1265-7R0	7.00	20%	12.3	17.7	11.2	Lead Frame
ASPIAIG-F1265-8R2	8.20	20%	15.5	16	10.5	Lead Frame
ASPIAIG-F1265-100	10.0	20%	16.5	15.5	10	Lead Frame
ASPIAIG-F1265-120	12.0	20%	20	14	9.5	Lead Frame
ASPIAIG-F1265-130	13.0	20%	24	13	9	Lead Frame
ASPIAIG-F1265-150	15.0	20%	28	12.5	9	Lead Frame
ASPIAIG-F1265-220	22.0	20%	37	12	9	Lead Frame
ASPIAIG-F1265-330	33.0	20%	58	11	8	Lead Frame
ASPIAIG-F1265-470	47.0	20%	90	9.5	6.5	Lead Frame

MECHANICAL DIMENSIONS



SERIES	A	B	C	D	E
ASPIAIG-F1040	11.0 ± 0.5	10.0 ± 0.3	3.8 ± 0.2	2.3 ± 0.3	3.0 ± 0.3
ASPIAIG-F1265	13.5 ± 0.5	12.5 ± 0.3	6.2 ± 0.3	2.3 ± 0.3	4.7 ± 0.3

SERIES	L TYP.	G TYP.	H TYP.
ASPIAIG-F1040	13.6	5.4	3.5
ASPIAIG-F1265	14.2	8.0	5.0

Dimension: mm

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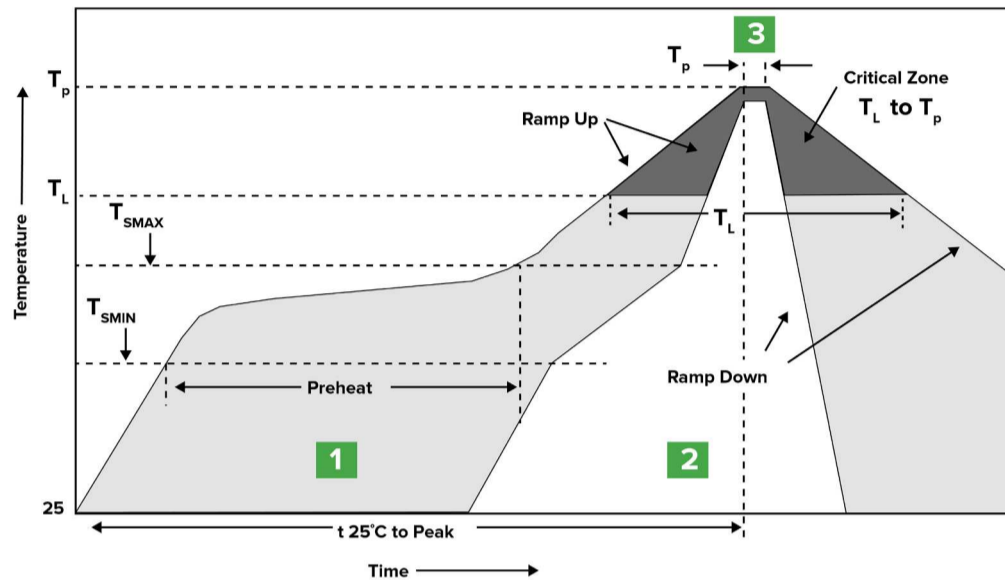


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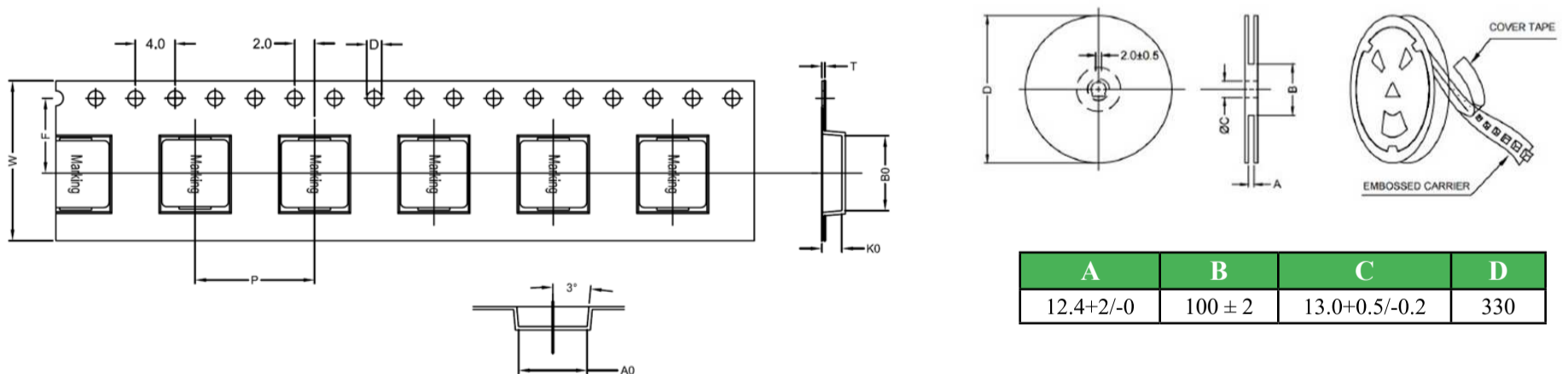
RoHS/RoHS II Compliant

REFLOW



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 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

PACKING (TAPE & REEL: 500 PCS/REEL)



A	B	C	D
12.4±2/-0	100 ± 2	13.0±0.5/-0.2	330

SERIES	W	F	P	D	A ₀	B ₀	T	K ₀
ASPIAIG-F1040	24.0±0.3	11.5±0.1	16.0±0.1	1.5±0.1	10.4±0.1	11.6±0.1	0.35±0.05	4.5±0.1
ASPIAIG-F1265	24.0±0.3	11.5±0.1	16.0±0.1	1.5±0.1	12.9±0.1	13.0±0.1	0.35±0.05	7.0±0.1