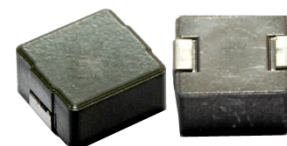


LOW PROFILE HIGH CURRENT SMD SHIELDED POWER INDUCTOR

ASPI-1338



12.9 x 13.8 x 3.8mm

FEATURES:

- 100% lead (Pb) free.
- Lowest DCR/uH, in this package size.
- Frequency range up to 5.0MHZ.
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction.

APPLICATIONS:

- PDA/Notebook/Desktop/Server applications.
- Low profile, high current power supplies.
- Battery powered devices.
- DC/DC converter for Field Programmable Gate Array(FPGA)

STANDARD SPECIFICATIONS:

PARAMETERS

Goldstone P/N:	ASPI-1338 xxxx
Operating temperature:	-40°C to +125°C
Storage temperature:	Less than +40°C, and 70% RH

Key Electrical Specifications @25°C

Part Number	Inductance @ 0A	Tolerance	Test Freq	DCR Typ	DCR Max	Saturation Current	Temperature Rise Current
Units	μH	%	kHz	mΩ	mΩ	A	A
Symbol	L	N, M				Isat*	Irms*
ASPI-1338-R22	0.22	N	200	0.75	1.3	65.0	38.5
ASPI-1338-8R2	8.2	M	200	26.5	31	13.5	8.0

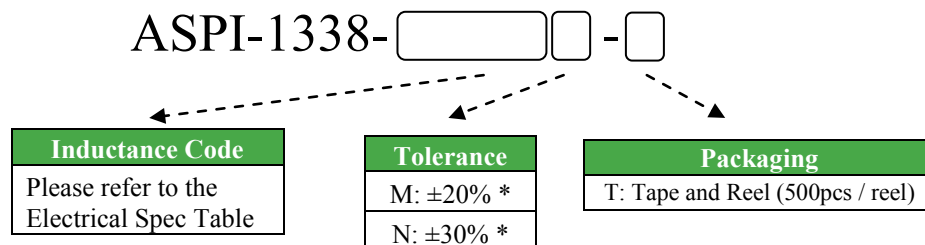
Contact ABRACON for other values available.

Test Conditions

1. Inductance tested at 200kHz, 0.25V, 0A; Tolerance M=±20%, N=±30%
2. All test data is in reference to 25°C ambient.
3. Isat will cause the inductance value to drop approximately 30%
4. Irms will cause an approximate ΔT of 40°C
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Please contact Abracon for the availability of other inductance values.

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)



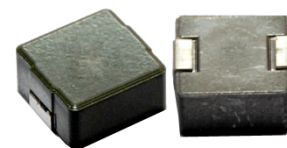
*N for 0.22μH

*M for 8.2μH

SHAANXI GOLD-STONE ELECTRONICS CO.,LTD

Web: www.gsmagnetics.com Tel:029-85401274 Fax:029-85401274 E-mail: sales@gsmagnetics.com

LOW PROFILE HIGH CURRENT SMD SHIELDED POWER INDUCTOR



12.9 x 13.8 x 3.8mm

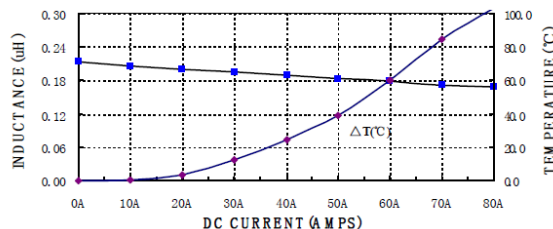
ASPI-1338



ELECTRICAL CHARACTERISTIC CURVES

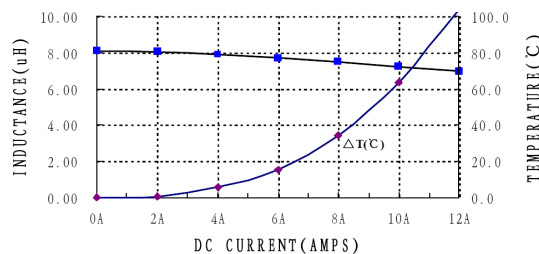
ASPI-1338-R22

DC current	0A	10A	20A	30A	38.5A	40A	50A	60A	65A	70A	80A
L(0.22uH)	0.214	0.206	0.200	0.196	0.194	0.190	0.183	0.179	0.177	0.171	0.168
$\Delta T(^{\circ}C)$	0.00	0.70	3.70	12.60	21.00	25.40	39.40	54.00	69.40	86.80	103.0

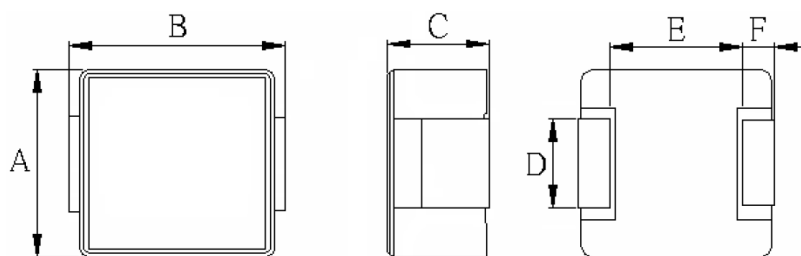


ASPI-1338-8R2

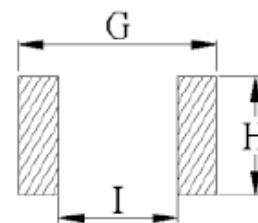
DC current	0A	2A	4A	6A	8A	10A	12A	13.5A
L(8.2uH)	8.117	8.05	7.894	7.707	7.475	7.228	6.951	6.741
$\Delta T(^{\circ}C)$	0.00	0.50	5.40	15.50	34.20	63.40	103.8	112.4



OUTLINE DRAWING:



Recommended Land Pattern



A Max	B Max	C Max	D	E Ref	F	G	H	I
12.9	14.0	3.8	4.0±0.5 for ASPI-1338-R22 4.7±0.3 for ASPI-1338-8R2	8.4	2.0	14.5	5.0	8.0

G	H	I
14.5	5.0	8.0

Dimension: mm

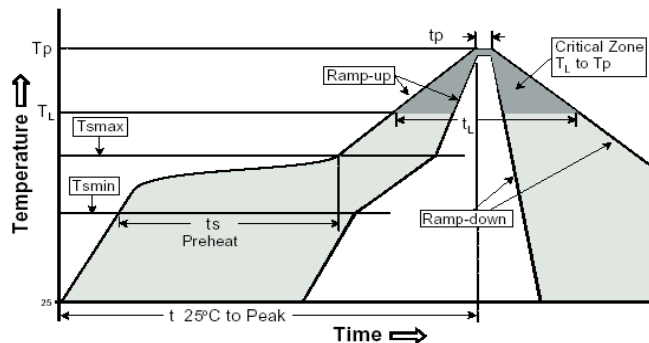
LOW PROFILE HIGH CURRENT SMD SHIELDED POWER INDUCTOR

ASPI-1338



12.9 x 13.8 x 3.8mm

REFLOW PROFILE:

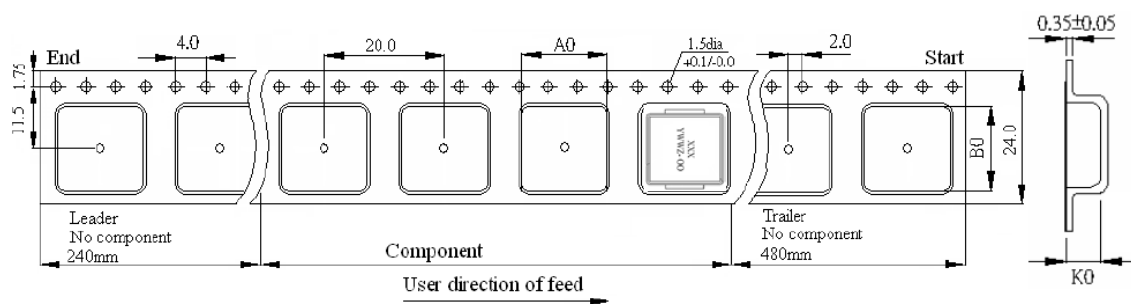


Profile Feature	Assembly
Average Ramp-Up Rate (Ts _{max} to Tp)	3°C /second max.
Preheat	150°C 200°C 60-180 seconds
-Temperature Min (Ts _{min}) -Temperature Max (Ts _{max}) -Time (ts _{min} to ts _{max})	
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	60-150 seconds
Peak/Classification Temperature (Tp)	245+0°C
Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Ramp-Down Rate	6°C/seconds max
Time 25°C to Peak Temperature	8 minutes max.

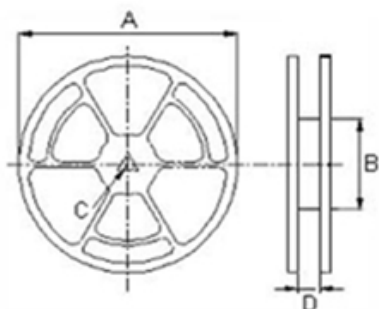
Storage Conditions and Handling

- (1) Temperature and humidity conditions : less than 40°C and 70% RH.
- (2) Products should be used within 6 months.
- (3) The packaging material should be kept where no chlorine or sulfur exists in the air.
- (4) Do not touch the electrodes (soldering terminals) with fingers as this may lead to deterioration of solder ability
- (5) The use of tweezers or vacuum pick-ups is strongly recommended for individual components.
- (6) Bulk handling should ensure that abrasion and mechanical shock are minimized.

TAPE & REEL: T: 500pcs/Reel



A ₀	13.2
B ₀	13.8
K ₀	4.0



A	330
B	100
C	13.5
D	24

Dimension: mm