

# HIGH CURRENT SHIELDED INDUCTOR

ASPI-1367-XXX



**RoHS**  
Compliant



13.8 x 12.9 x 6.7mm

## 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)

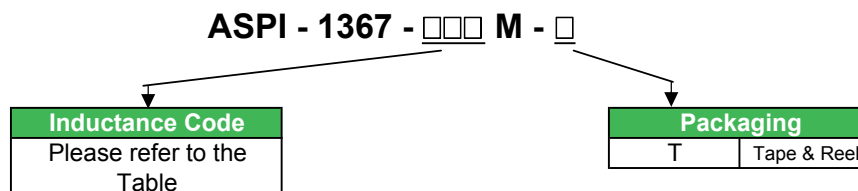
## ELECTRICAL SPECIFICATIONS:

<b>ABRACON P/N:</b>	ASPI-1367-xxx
<b>Operating Temperature:</b>	-55°C to +125°C
<b>Storage Temperature:</b>	less than +40°C, and 70% R.H.

Part Number	L ( $\mu$ H)	Tolerance %	Test Freq. (kHz)	R <sub>DC</sub> (m $\Omega$ ) Max	I <sub>sat</sub> (A)	I <sub>rms</sub> (A)
ASPI-1367-R10	0.1	M	200	0.5	75	55
2R2	2.2	M	200	4.2	33	20
3R3	3.2	M	200	6.8	29	15
4R7	4.7	M	200	11.2	25	13.5
5R6	5.6	M	200	11.5	24	12
6R8	6.8	M	200	14.9	16.5	11.5
8R2	8.2	M	200	16.6	16	10.5
100	10	M	200	18.5	15.5	10

- Note:**
1. inductance tested at 0.25V; Tolerance M=±20%
  2. All test data is in reference to 25°C ambient.
  3. Isat will cause the inductance value to drop approximately 20%
  4. Irms will cause an approximate  $\Delta$ T 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



# HIGH CURRENT SHIELDED INDUCTOR

ASPI-1367-XXX

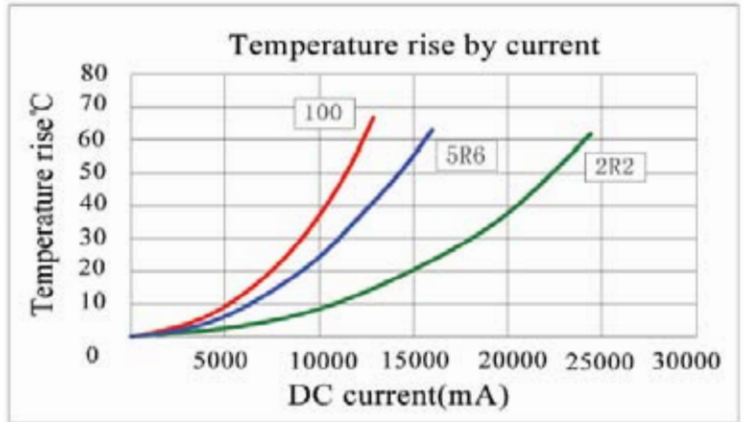
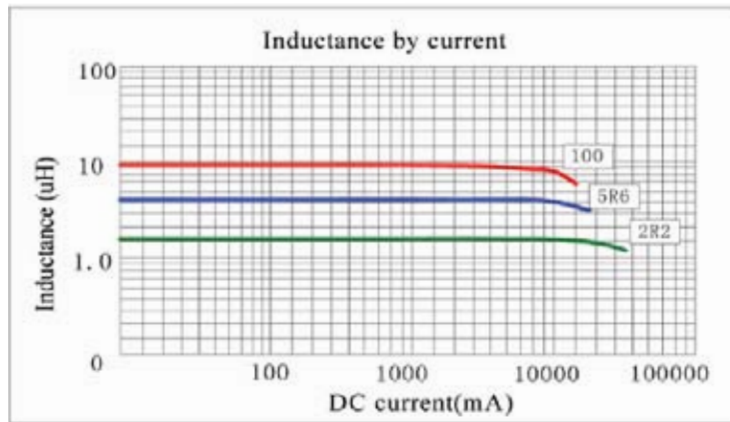


**RoHS**  
Compliant

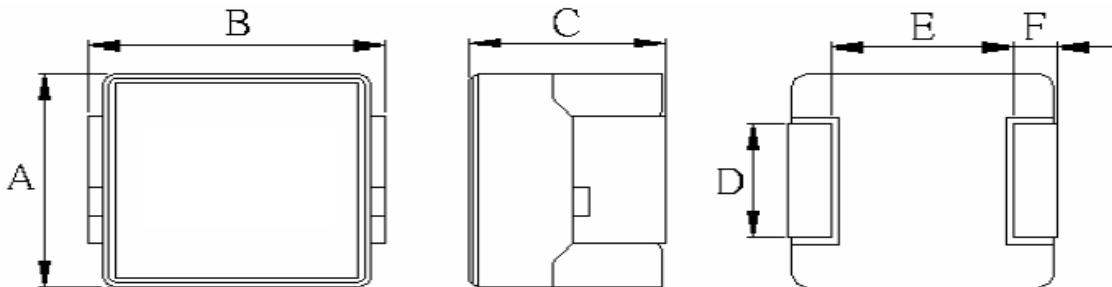


13.8 x 12.9 x 6.7mm

## EXAMPLE CURVES:

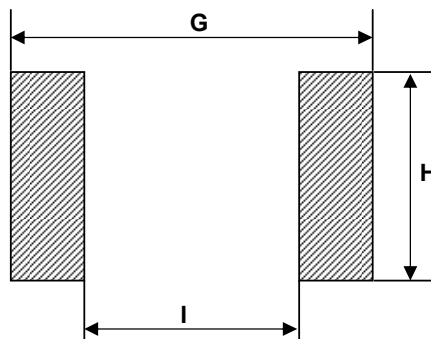


## OUTLINE DIMENSIONS:



Part#	A	B	C	D	E	F
ASPI-1367-xxx	0.508 max. (12.9 max.)	0.543 max. (13.8 max.)	0.264 max. (6.7 max.)	0.185±0.012 (4.7±0.3)	0.331 ref. (8.4 ref.)	0.094 ref. (2.4 ref.)

### Recommended Land Pattern



Part#	G	H	I
ASPI-1367-xxx	0.543 (13.8)	0.203. (5.15)	0.299 (7.6)

Dimension : Inches(mm)

# HIGH CURRENT SHIELDED INDUCTOR

ASPI-1367-XXX

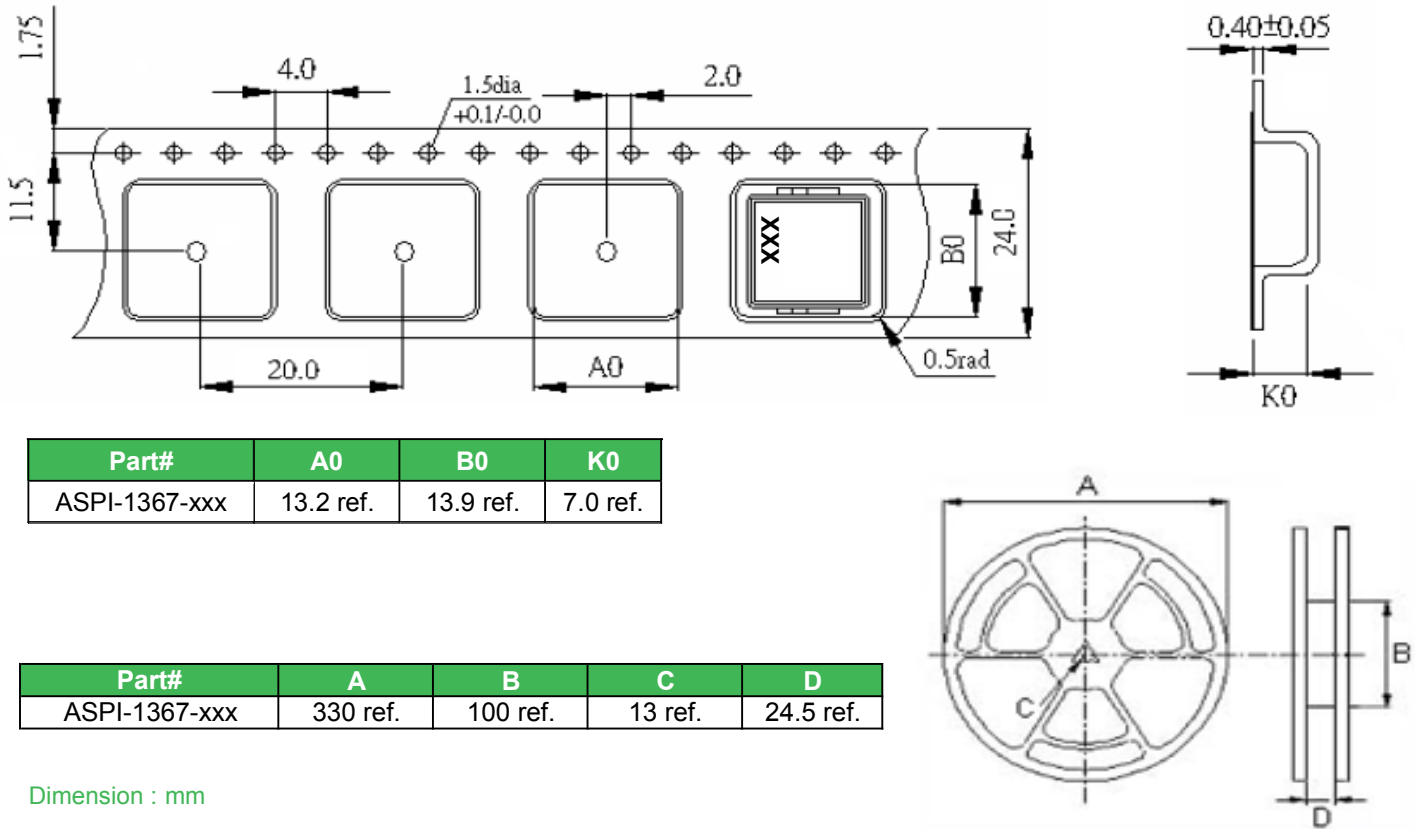


RoHS  
Compliant

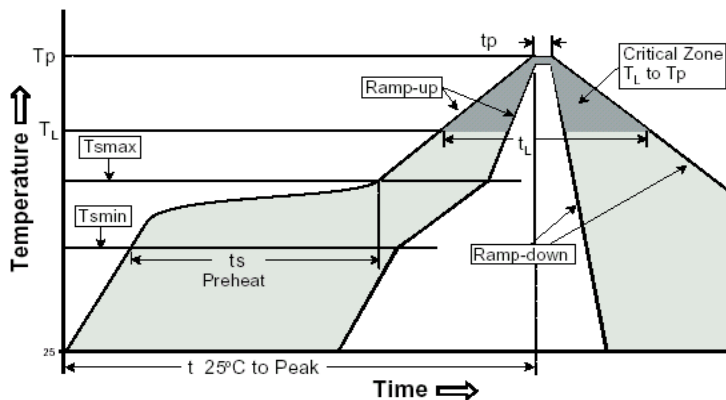


13.8 x 12.9 x 6.7mm

TAPE & REEL: T= tape and reel (250pcs/reel)



REFLOW PROFILE



Profile Feature	Assembly
Average Ramp-Up Rate ( $T_{smax}$ to $T_p$ )	3°C /second max.
<b>Preheat</b>	
-Temperature Min ( $T_{smin}$ )	150°C
-Temperature Max ( $T_{smax}$ )	200°C
-Time ( $t_{smin}$ to $t_{smax}$ )	60-180 seconds
<b>Time maintained above:</b>	
-Temperature ( $T_L$ )	217°C
-Time ( $t_L$ )	60-150 seconds
Peak/Classification Temperature ( $T_p$ )	245±0°C
Time within 5°C of actual Peak Temperature ( $t_p$ )	20-40 seconds
Ramp-Down Rate	6°C/seconds max
Time 25°C to Peak Temperature	8 minutes max.

**NOTE:** Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.

ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 11.01.09**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)