

**BOURNS (DONGGUAN) ELECTRONICS CO., LTD****SPECIFICATION FOR APPROVAL**

CUSTOMER: WOLFSPEED

AGENCY: ---

CUSTOMER P/N: --- CUSTOMER REV.: ---

BOURNS P/N.: BS501143T BOURNS REV.: 04

PRODUCT NAME: INDUCTOR PROJECT No.: MAG-3000763

DESCRIPTION: INDUCTOR

FILE No.: BD3RD-R2825 RELEASED DATE: 28-Oct-2022

POSITION	SIGNATURE	DATE
DE	Xianjia Zhang	28-Oct-2022
ME	Jerry Qiu	28-Oct-2022
CHECKED	Mark Wu	28-Oct-2022
APPROVED	Mike Liang	28-Oct-2022
BOURNS CACHET		

SIGNATURE	
NAME	
POSITION	
DATE	
CUSTOMER CACHET	



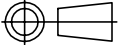
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Address: No.3 Xisha Road, Xinan Area, Shijie Town, Dongguan City, Guangdong Province, China
Telephone: +86(769)8632-7771 Fax: +86(769)8632-7773

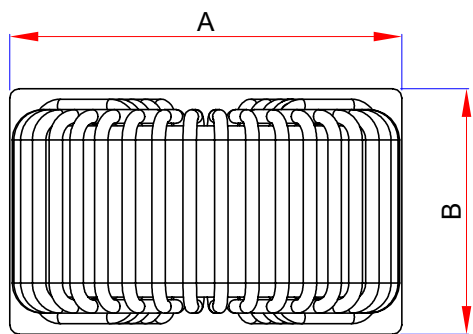
AMENDMENT RECORD

Rev.	Reason For Change	Details	Approved by	Approved Date
01	The First Submittal	---	Mike Liang	05-May-2022
02	Customer Request	1.Change INDUCTANCE@41.9ADC from 280uH Min. to 188uH Min. 2.Change DCR from TBD to 27.5mΩ Max.	Mike Liang	30-May-2022
03	BOURNS Request	1.Add BOURNS P/N: BS501143T	Mike Liang	05-Sep-2022
04	BOURNS Request	1.Correction of PCB LAYOUT dimensions key in error in version 03.	Mike Liang	10-Oct-2022
		1.Change size E from Ø2.65±0.2 to Ø2.65±0.5 2.Change PCB aperture from Ø3.25 to Ø3.45	Mike Liang	28-Oct-2022

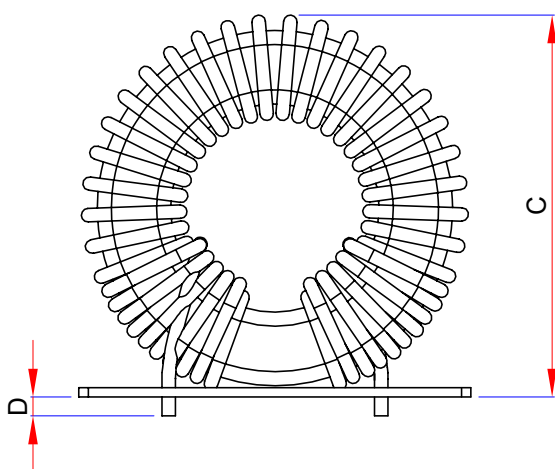
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TOLERANCE (UNLESS OTHERWISE SPECIFIED)	SCALE: NTS.	PROJECT NO.: MAG-3000763	CUSTOMER: WOLFSPEED	
0<L<5:±0.1 5<L<16:±0.3 16<L<50:±0.5	ANGLE: ±1°		CUSTOMER P/N: ---	REV.: ---
		PAGE NO.: 1 OF 5	BOURNS P/N: BS501143T	REV.: 04

1. DIMENSIONS (mm):



TOP VIEW



FRONT VIEW

Marking:

BOURNS

BS501143T

YYWW X R

YY: Year

WW: Week

X : A -- Monday

B -- Tuesday

C -- Wednesday

D -- Thursday

E -- Friday

F -- Saturday

G -- Sunday

R : Revision

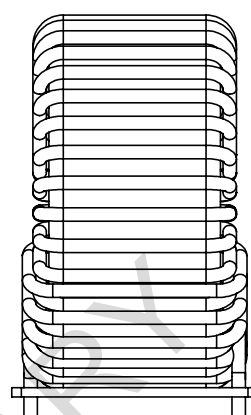
A: 84.0 Max.

B: 53.0 Max.

C: 82.0 Max.

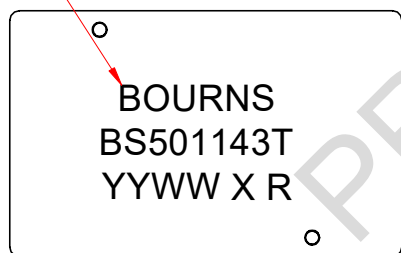
D: 4.0±0.5

E: 2*Ø2.65±0.5

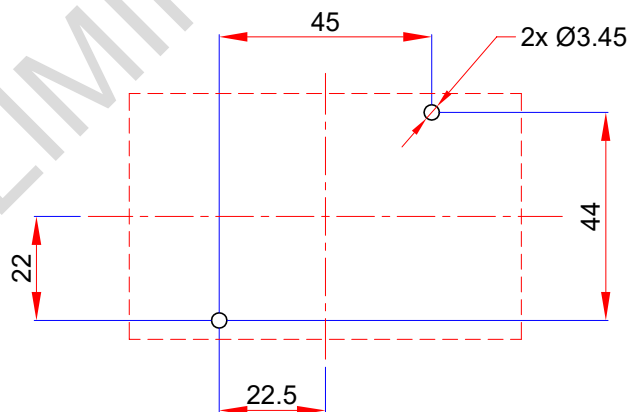


SIDE VIEW

Marking



BOTTOM VIEW

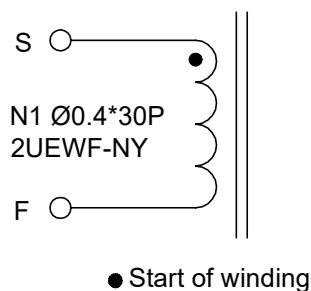


SUGGESTED PCB LAYOUT
TOP VIEW

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2. SCHEMATIC:



3. ELECTRICAL CHARACTERISTIC: At 25 °C

NO.	ITEM	TERMINAL	ELECTRICAL CHARACTERISTICS	TOLERANCE	TEST METERS / CONDITION
1	INDUCTANCE @0ADC	S-F	398uH	±10%	CH-3250/80kHz, 0.1V
2	INDUCTANCE @41.9ADC	S-F	188μH	Min.	CH-3250/80kHz, 0.1V
3	DC RESISTANCE	S-F	27.5mΩ	Max.	CH-502AC
4	HI-POT	N1-CORE	5mA	Max.	CH-9052/300VDC 2s

4. NOTES:

- 4.1 Operation Temperature: -40°C to +125°C
- 4.2 Storage Temperature for part in packaging: -40°C to +125°C
- 4.3 The dimension determined from the terminal pins is derived from the pin material alone.
It does not include, or factor in, solder deposits or icicles from the manufacturing processes.
- 4.4 Appearance inspection reference to general cosmetics standard (Prototype and engineering samples are not included)

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<div>BOURNS®</div> <div>BOURNS (DONGGUAN) ELECTRONICS CO., LTD</div>			<div>PRODUCT NAME:</div> <div>INDUCTOR</div>		<div>RoHS COMPLIANT</div> <div></div>
<div>TOLERANCE</div> <div>(UNLESS OTHERWISE SPECIFIED)</div>		<div>SCALE:</div> <div>NTS.</div>	<div>PROJECT NO.:</div> <div>MAG-3000763</div>	<div>CUSTOMER:</div> <div>WOLFSPEED</div>	
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			<div>BOURNS P/N:</div> <div>BS501143T</div>	<div>REV.:</div> <div>04</div>	

5. PACKING:

TBD

PRELIMINARY

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Industrial, Consumer

Prototype Product / Sample Disclaimer and Limitation of Liability

Bourns® part number: BS501143T

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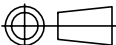
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