



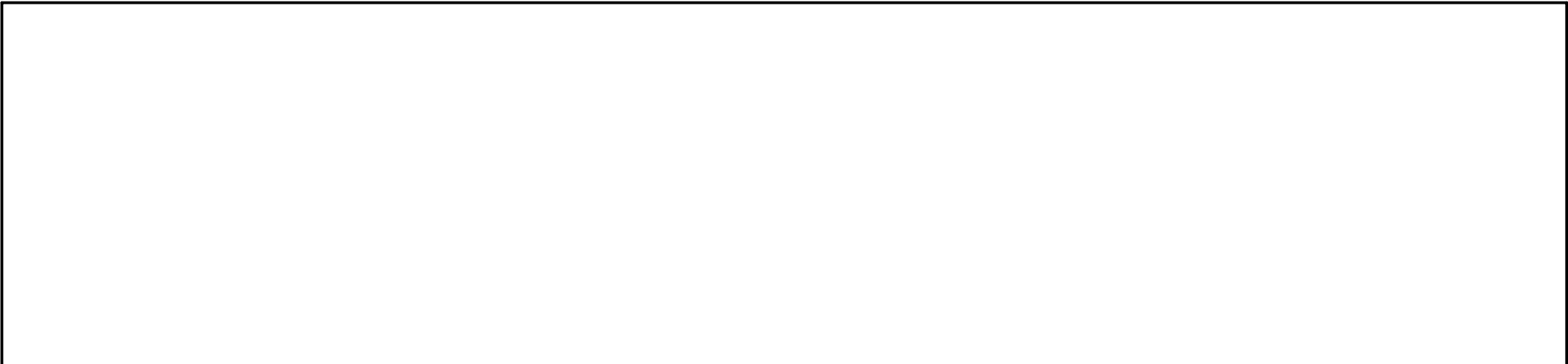
SPECIFICATION FOR APPROVAL

Title	Bidirectional DC-DC Boost Inductor		
Reference Design	TIDA-010938		
Bourns Part Number	145452	Rev	X3
Customer			
Customer Part Number		Rev	

Designed	CS	07/Aug/2024
Drawn	MD	07/Aug/2024
Checked		
Approved		

Customer Approval	
Name	
Position	
Date	


Preliminary

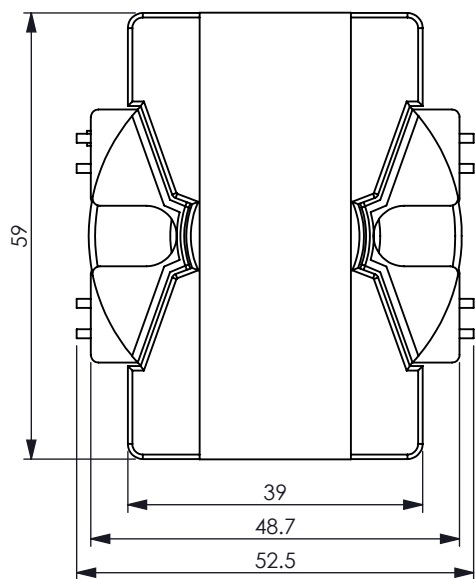


CHANGE HISTORY

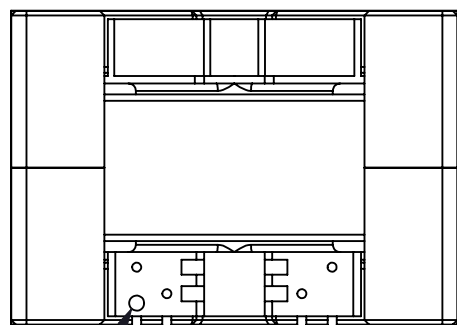
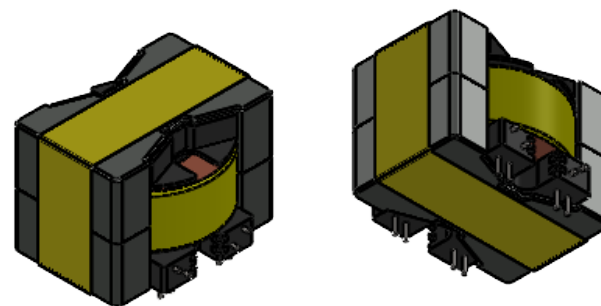
Revision	Date	Description of Change	Approved	Date
X1	14/Aug/2024	Dimensions Added to Drawing Page		
X2	02/Oct/2024	Electrical Specification Update		
X3	10/Mar/2025	Designer Name Identified, Electrical Specification Notes Update		

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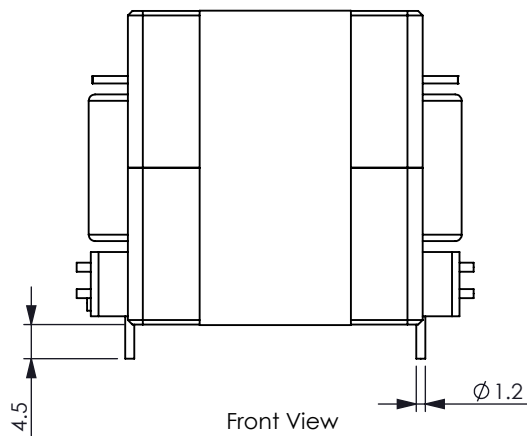
<b>BOURNS</b>	Title Bidirectional DC-DC Boost Inductor		Tolerance (Unless Otherwise Specified) 0 < L < 5 : ±0.1      Angle 5 < L < 16 : ±0.3      ± 1° 16 < L < 50 : ±0.5	
	Project Number MAG-3001904			
B181128    V1    D6755	Bourns P/N 145452	Rev X3	Units: mm Scale: NTS	 DRAWN IN THIRD ANGLE PROJECTION.
Customer	Customer P/N	Rev	RoHS and REACH Compliant	Page: 2 of 9



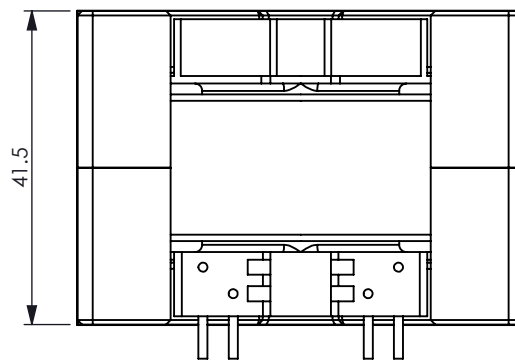
Top View



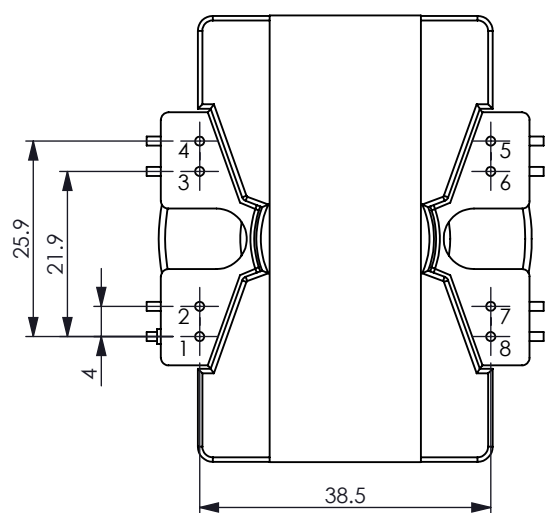
Indicates Pin 1



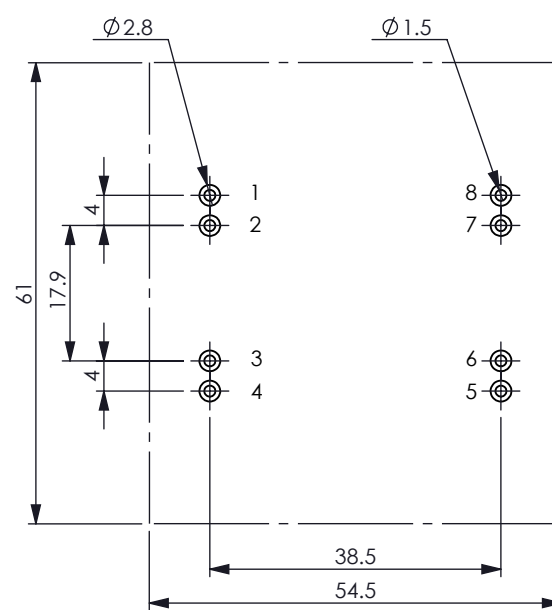
Front View



End View




Bottom View

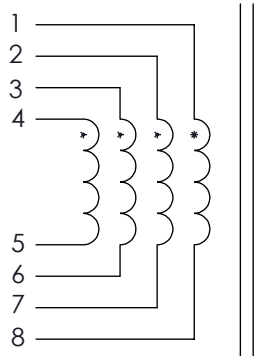


PCB Layout  
(Top View)

Note: Join Pins 1, 2, 3, 4 and Pins 5, 6, 7, 8  
On The PCB

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Schematic  
Note: Join Pins 1, 2, 3, 4 and Pins 5, 6, 7, 8  
On The PCB


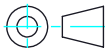
ELECTRICAL SPECIFICATION

No.	Item	Terminal	Value	Tolerance	Condition	Remarks
1	Inductance (0 ADC)	1, 2, 3, 4 To 5, 6, 7, 8	200 $\mu$ H	$\pm 10\%$	1V at 100kHz	Short Pins (1, 2, 3, 4) Short Pins (5, 6, 7, 8)
2	Saturation Current	1, 2, 3, 4 To 5, 6, 7, 8	23.5 A	-	30% Roll Off From Initial	Short Pins (1, 2, 3, 4) Short Pins (5, 6, 7, 8)
3	DC Resistance	1, 2, 3, 4 To 5, 6, 7, 8	23 m $\Omega$	Typ	-	Short Pins (1, 2, 3, 4) Short Pins (5, 6, 7, 8)

GENERAL INFORMATION

1. Operating Temperature: -40°C to +125°C Including Temperature Rise
2. Storage Temperature: -40°C to +85°C

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