

# BOURNS

## SPECIFICATION FOR APPROVAL

Title	1.6kW Transformer		
Reference Design	TIDA-010933		
Bourns Part Number	181923	Rev	X4
Customer			
Customer Part Number		Rev	

Designed		
Drawn	MD	04/06/2024
Checked		
Approved		

Customer Approval	
Name	
Position	
Date	



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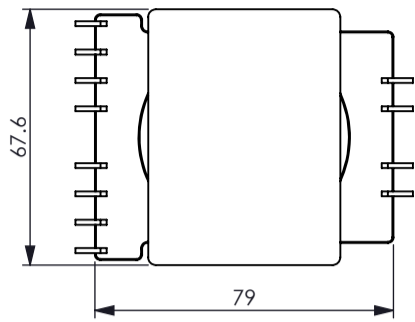
Preliminary

**CHANGE HISTORY**

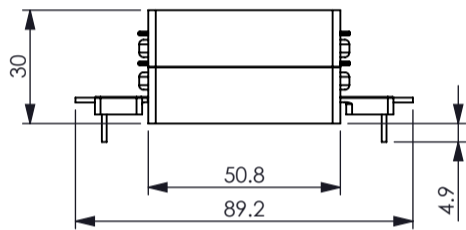
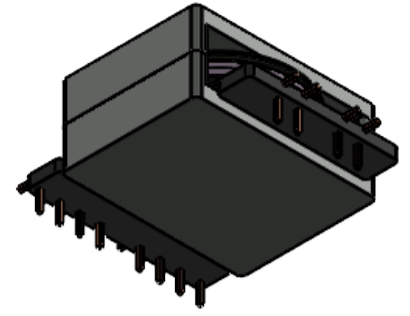
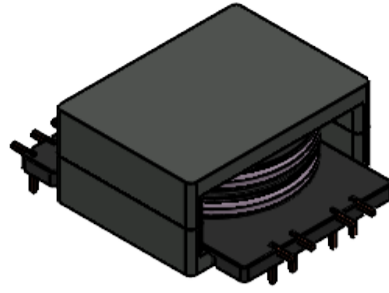
Revision	Date	Description of Change	Approved	Date
X1	12/04/2024	Update to Schematic and Spec		
X2	04/06/2024	Core Geometry Modification, Bobbin Modifications, Update to Electrical Information		

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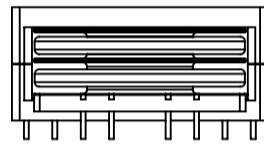
	Title 1.6kW Transformer		Tolerance (Unless Otherwise Specified) 0 < L < 5 : ±0.1     Angle 5 < L < 16 : ±0.3     ± 1° 16 < L < 50 : ±0.5	
	Project Number MAG-3001707			
B181064 V4 D6735	Bourns P/N 181923	Rev X4	Units: mm Scale: NTS	 <small>DRAWN IN THIRD ANGLE PROJECTION.</small>
Customer	Customer P/N	Rev	RoHS and REACH Compliant	Page: 2 of 9



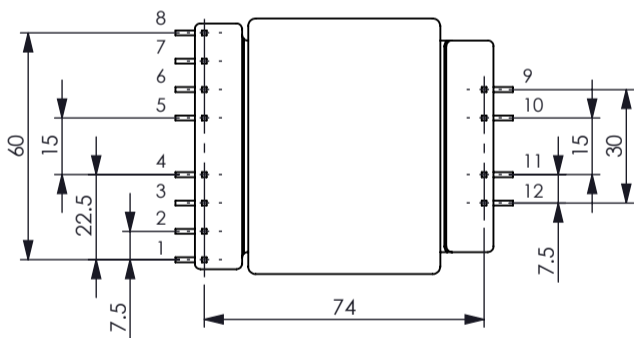
Top View



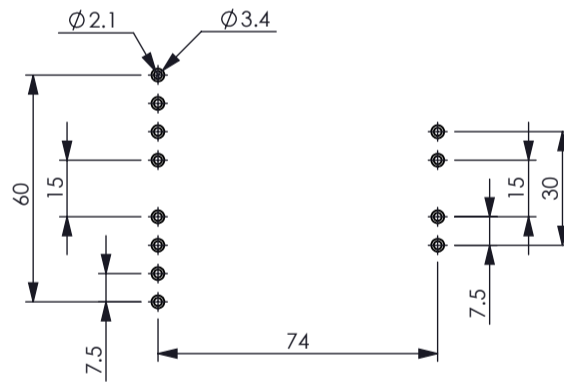
Front View



End View



Bottom View

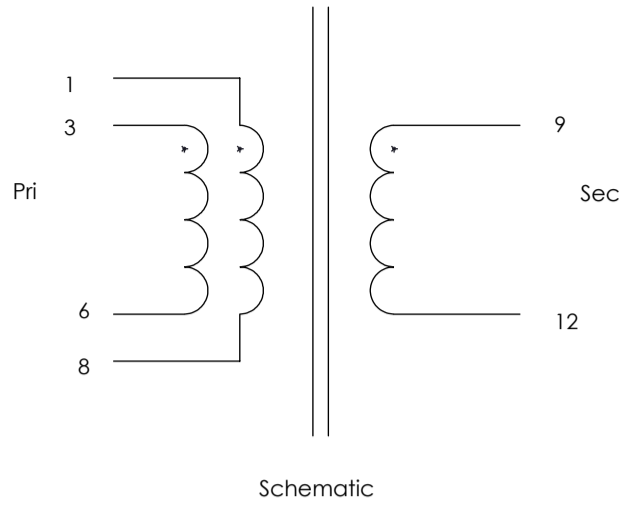


PCB Layout  
(Top View)

Preliminary

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**ELECTRICAL SPECIFICATION**

No.	Item	Terminal	Value	Tolerance	Condition	Remarks
1	Inductance (0 ADC)	1 & 3 - 6 & 8	6 $\mu$ H	$\pm 10\%$	1V at 100kHz	
2	Leakage Inductance	1 & 3 - 6 & 8	950 nH	$\pm 10\%$	1V at 100kHz Short Pins 9 & 12	
3	DC Resistance	Pri (1 & 3 - 6 & 8)	8 m $\Omega$	$\pm 10\%$		
		Sec (9 & 12)	17 m $\Omega$	$\pm 10\%$		
4	Turns Ratio	Pri : Sec	4 : 11	$\pm 10\%$		
5	Hi-Pot	Pri -Sec	Pass		1.5kVAC, 50Hz, 1mA, 60s	No Breakdown

**GENERAL INFORMATION**

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

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