

WEBENCH® Transformer Report

Design : 5 UCC28C43D
UCC28C43 160V-160V to 12.00V @ 2A

#	Name	Value
1.	Core Part Number	B66421G0000X197
2.	Core Manufacturer	TDK
3.	Coil Former Part Number	B66422W1010D001
4.	Coil Former Manufacturer	TDK

Transformer Electrical Diagram

Primary

Turns	178.0
AWG	29.0
Layers	4.0
Strands	1.0
Insulation Type	Heavy Insulated Magnet Wire

Secondary

Turns	10.0
AWG	26.0
Layers	1.0
Strands	2.0
Insulation Type	Triple Insulated

Auxiliary

Turns	11.0
AWG	28.0
Layers	1.0
Strands	4.0
Insulation Type	Heavy Insulated Magnet Wire

Transformer Construction Diagram

Winding Instruction

Winding	AWG	Turns	Winding Orientation
Primary First 2/4.0	29.0	89	Clockwise
Auxiliary	28.0	11.0	Counter Clockwise
Triple Insulated Secondary	26.0	10.0	Counter Clockwise
Primary Second 2/4.0	29.0	89	Clockwise

Transformer Parameters

#	Name	Value
1.	Lpri	0.00414H
2.	Inductance Factor(AI)	131.0nH
3.	Npri	178.0
4.	Nsec	10.0
5.	Naux	11.0

#	Name	Value
6.	Core Type	EFD25/13/9
7.	Core Material	N97
8.	Bmax	0.21T
9.	Switching Frequency	53.09kHz
10.	DMax	0.6
11.	Ipk(Primary)	0.51A
12.	Irms(Primary)	0.25A
13.	Ipk(Secondary)	9.16A
14.	Irms(Secondary)	3.67A

Design Assistance

1. **UCC28C43** Product Folder : <http://www.ti.com/product/UCC28C43> : contains the data sheet and other resources.

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