

# WEBENCH<sup>®</sup> Transformer Report

Design : 221 UCC2803DTR  
UCC2803DTR 36V-60V to 24.00V @ 2A

#	Name	Value
1.	Core Part Number	B66229G0000X187
2.	Core Manufacturer	TDK
3.	Coil Former Part Number	B66230A1114T001
4.	Coil Former Manufacturer	TDK

## Transformer Electrical Diagram

### Primary

Turns	22.0
AWG	25.0
Layers	2.0
Strands	3.0
Insulation Type	Heavy Insulated Magnet Wire

### Secondary

Turns	11.0
AWG	24.0
Layers	1.0
Strands	2.0
Insulation Type	Triple Insulated

### Auxiliary

Turns	5.0
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 1/2.0	25.0	11	Clockwise
Auxiliary	28.0	5.0	Counter Clockwise
Triple Insulated Secondary	24.0	11.0	Counter Clockwise
Primary Second 1/2.0	25.0	11	Clockwise

## Transformer Parameters

#	Name	Value
1.	Lpri	8.8E-5H
2.	Inductance Factor(AI)	181.0nH
3.	Npri	22.0
4.	Nsec	11.0
5.	Naux	5.0

#	Name	Value
6.	Core Type	E32/16/9
7.	Core Material	N87
8.	Bmax	0.22T
9.	Switching Frequency	63.29kHz
10.	DMax	0.6
11.	Ipk(Primary)	4.58A
12.	Irms(Primary)	2.24A
13.	Ipk(Secondary)	9.17A
14.	Irms(Secondary)	3.67A

## Design Assistance

1. **UCC2803** Product Folder : <http://www.ti.com/product/UCC2803> : contains the data sheet and other resources.

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