## WEBENCH ${ }^{\circledR}$ Transformer Report

Design : 4878393/26 UCC28C44DR
UCC28C44DR 48.0V-56.0V to 12.00 V @ 2.0A
\# Name

1. Core Part Number Value
2. Core Manufacturer

B66417G0000X197
3. Coil Former Part Number

B66418W1008D001
4. Coil Former Manufacturer

TDK

## Transformer Electrical Diagram

Primary

| Turns | 29 |
| :--- | :--- |
| AWG | 27 |
| Layers | 2 |
| Strands | 2 |
| Insulation Type | Heavy <br>  <br>  <br>  <br>  <br>  <br>  <br> Insulated <br> Magnet Wire |

Auxiliary

| Turns | 15 |
| :--- | :--- |
| AWG | 28 |
| Layers | 1 |
| Strands | 2 |

Insulation Type
Heavy
Insulated Magnet Wire

Secondary

AWG 28

Layers 2
Strands 3
Insulation Type Triple Insulated

Transformer Construction Diagram


Winding Instruction

| Winding | AWG |  | Turns |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Winding Orientation |  |  |
| Primary First $1 / 2$ | 27 | 15 |  | Clockwise |
| Auxiliary | 28 | 15 | Counter Clockwise |  |
| Triple Insulated Secondary | 28 | 13 | Counter Clockwise |  |
| Primary Second $1 / 2$ | 27 | 14 | Clockwise |  |

## Transformer Parameters

| \# Name | Value |
| :---: | :---: |
| 1. Lpri | 8.5E-5H |
| 2. Inductance Factor(AI) | 102 nH |
| 3. Npri | 29 |
| 4. Nsec | 13 |
| 5. Naux | 15 |
| 6. Core Type | EFD20/10/7 |
| 7. Core Material | N97 |
| 8. Bmax | 0.25 T |
| 9. Switching Frequency | 99.31 kHz |
| 10. DMax | 0.4 |
| 11. $\operatorname{lpk}$ (Primary) | 2.62A |
| 12. Irms(Primary) | 1.04 A |
| 13. $\operatorname{lpk}$ (Secondary) | 5.84A |
| 14. Irms (Secondary) | 2.83A |

## Design Assistance

1. UCC28C44 Product Folder : http://www.ti.com/product/UCC28C44 : contains the data sheet and other resources.

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