

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

Design : 9 LM5023MMX-2/NOPB  
LM5023MMX-2/NOPB 85V-265V to 19.00V @ 3.43A

#	Name	Value
1.	Core Part Number	B66423G0000X187
2.	Core Manufacturer	TDK
3.	Coil Former Part Number	B66424W1012D001
4.	Coil Former Manufacturer	TDK

## Transformer Electrical Diagram

### Primary

Turns	71.0
AWG	29.0
Layers	4.0
Strands	3.0
Insulation Type	Heavy Insulated Magnet Wire

### Secondary

Turns	12.0
AWG	25.0
Layers	1.0
Strands	2.0
Insulation Type	Triple Insulated

### Auxiliary

Turns	7.0
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	36	Clockwise
Auxiliary	28.0	7.0	Counter Clockwise
Triple Insulated Secondary	25.0	12.0	Counter Clockwise
Primary Second 2/4.0	29.0	35	Clockwise

## Transformer Parameters

#	Name	Value
1.	Lpri	3.89E-4H
2.	Inductance Factor(AI)	78.0nH
3.	Npri	71.0
4.	Nsec	12.0
5.	Naux	7.0

#	Name	Value
6.	Core Type	EFD30/15/9
7.	Core Material	N87
8.	Bmax	0.21T
9.	Switching Frequency	55.00kHz
10.	DMax	0.45
11.	Ipk(Primary)	2.6A
12.	Irms(Primary)	1.01A
13.	Ipk(Secondary)	15.4A
14.	Irms(Secondary)	5.94A

## Design Assistance

1. **LM5023** Product Folder : <http://www.ti.com/product/LM5023> : contains the data sheet and other resources.

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