

# 1.5kVrms DC/DC Converter

6 Pin SMD or DIL Isolation Modules



## Product Features:

- Provide the isolation and voltage outputs required for small, low cost DC/DC converter circuits.
- Designed specifically for use with the Maxim™ MAX253, MAX845, and MAX3535/MXL1535 drivers
- Isolation Voltage: 1,500 Vrms. Other packages are available with isolation voltages up to 4.5KVrms.
- UL60950 and EN60950 approved.
- Temperature Range: -40 to +85°C

| SMD Part Number | DIL Part Number | Turns Ratio ( $\pm 3\%$ ) PRI : SEC | PRI LL ( $\mu\text{H Typ.}$ ) | PRI OCL ( $\mu\text{H Typ.}$ ) | PRI DCR ( $\Omega \text{ Max.}$ ) | ET Constant (V- $\mu\text{s Min.}$ ) |
|-----------------|-----------------|-------------------------------------|-------------------------------|--------------------------------|-----------------------------------|--------------------------------------|
| TGM-210NSLF     | TDM-210NELF     | 2CT:1CT                             | 0.40                          | 960                            | 0.8                               | 11                                   |
| TGM-220NSLF     | TDM-220NELF     | 8CT:3CT                             | 0.40                          | 960                            | 0.8                               | 11                                   |
| TGM-230NSLF     | TDM-230NELF     | 4CT:3CT                             | 0.40                          | 960                            | 0.8                               | 11                                   |
| TGM-240NSLF     | TDM-240NELF     | 3CT:4CT                             | 0.40                          | 960 <td 0.8                    | 11                                |                                      |
| TGM-250NSLF     | TDM-250NELF     | 1CT:1CT                             | 0.40                          | 960                            | 0.8                               | 11                                   |
| TGM-280NSLF     | TDM-280NELF     | 3CT:8CT                             | 0.40                          | 960                            | 0.8                               | 11                                   |

## Notes:

1. Primary Pins: 1-3
2. 2kV isolation transformers available – contact factory
3. For more information, pertaining to the MAX845 please contact Maxim at (408) 737-7600.
4. Maxim is a registered trademark of Maxim Integrated Products.

## Schematic



# 6 Pin, 1.5kVrms DC/DC Converter Isolation Modules

## SMD Package (NS)

## DIL Package (NE)



Dimensions: inches [mm]  
Co-Planarity: 0.004 [0.10]



Recommended  
Solder Pad Dimensions

US Patent Numbers for SMD Devices  
5,656,985 6,297,721 B1  
6,297,720 B1 6,320,489 B1  
6,344,785 B1 6,662,431 B1

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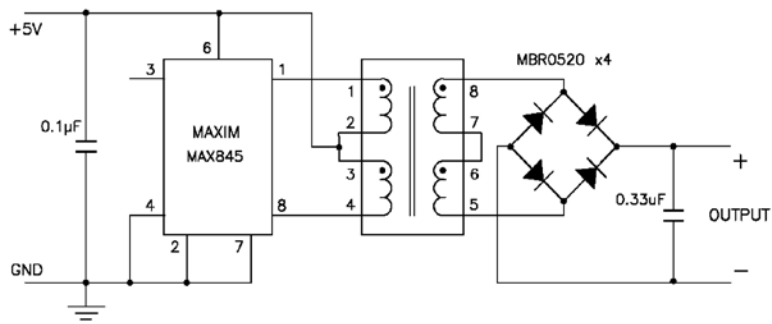
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# Maxim MAX253/MAX845 DC/DC Converter Application Note

The TDM and TGM series of transformers have been designed specifically for use with the Maxim™ MAX253 and MAX845 monolithic oscillator/power driver with 3.3V or 5V power source. Multiple output voltages can be achieved depending on the diode circuit and transformer selected. For more information, pertaining to the MAX253/MAX845 please contact Maxim at (408) 737-7600. Maxim is a registered trademark of Maxim Integrated Products.

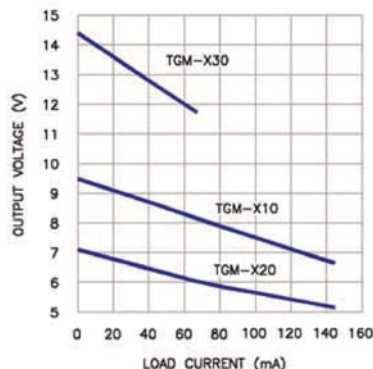
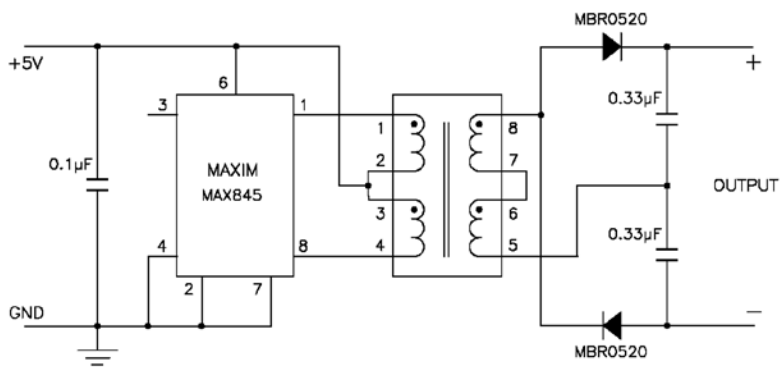
## Bridge Rectifier Circuit

## Output Voltages



## Doubler Circuit

## Output Voltages



## Full Wave Rectifier Circuit

## Output Voltages

