

# 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	0.8	11
TGM-250NSLF	TDM-250NELF	1CT:1CT	0.40	960 <td 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



2880 Lakeside Drive #116  
Santa Clara, CA 95054  
(650) 903-3800

[www.haloelectronics.com](http://www.haloelectronics.com)

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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

