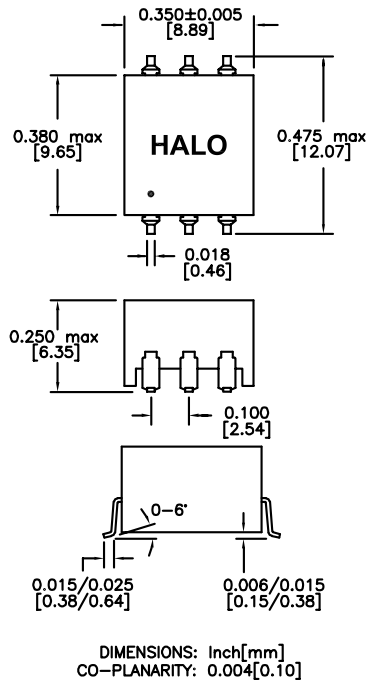


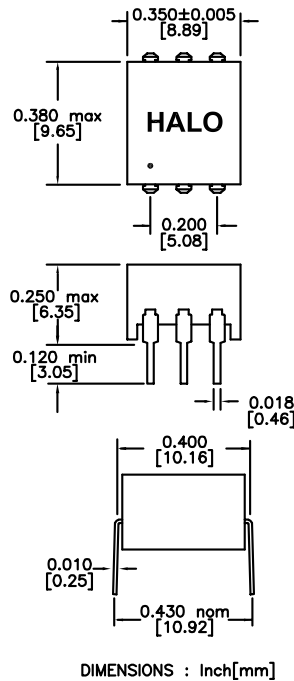
The TGM-NA and TDM-NA, reinforced insulation, 6 pin transformers provide the isolation and voltage outputs required for low cost DC/DC converter circuits. UL1950, IEC950 and EN60950 recognized. Designed specifically for use with the Maxim™ MAX253 and MAX845 monolithic oscillator/power drivers with 3.3V or 5V power source. Other packages are available with isolation voltages ranging from 500 to 4.5KVrms. For more information, pertaining to the MAX845 please contact Maxim at (408) 737-7600. Maxim is a registered trademark of Maxim Integrated Products.



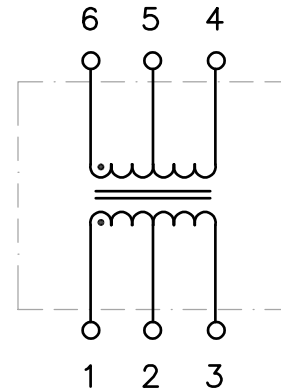
**TGM-NA SMD Package**



**TDM-NA DIL Package**



**Circuit Diagram**



Electrical Specifications @ 25°C  
Operating Temp: -40 to +85°C  
Pri Pins: 1-3  
Pri OCL: 960µH typ  
Pri DCR: 0.8Ω

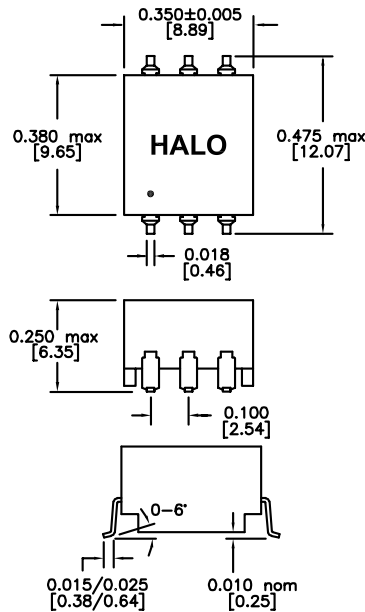
Patented Construction  
US Pat Nbrs: 5,656,985

| SMD       | Part Number | Turns Ratio (±3%) | ET Constant | Isolation |
|-----------|-------------|-------------------|-------------|-----------|
|           | DIL         | PRI:SEC           | V-us min.   | Vrms      |
| TGM-310NA | TDM-310NA   | 2CT:1CT           | 18          | 3,000     |
| TGM-320NA | TDM-320NA   | 8CT:3CT           | 18          | 3,000     |
| TGM-330NA | TDM-330NA   | 4CT:3CT           | 18          | 3,000     |
| TGM-340NA | TDM-340NA   | 3CT:4CT           | 18          | 3,000     |
| TGM-350NA | TDM-350NA   | 1CT:1CT           | 18          | 3,000     |
| TGM-360NA | TDM-360NA   | 1CT:2CT           | 22          | 3,000     |
| TGM-380NA | TDM-380NA   | 3CT:8CT           | 22          | 3,000     |

The TGM-NA and TDM-NA, reinforced insulation, 6 pin transformers provide the isolation and voltage outputs required for low cost DC/DC converter circuits. UL1950, IEC950 and EN60950 recognized. Designed specifically for use with the Maxim™ MAX253 and MAX845 monolithic oscillator/power drivers with 3.3V or 5V power source. Other packages are available with isolation voltages ranging from 500 to 4.5KVrms. For more information, pertaining to the MAX845 please contact Maxim at (408) 737-7600. Maxim is a registered trademark of Maxim Integrated Products.

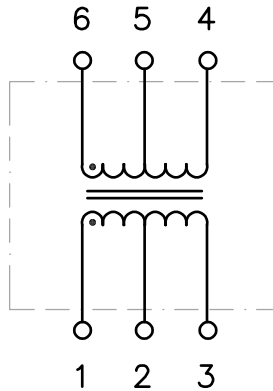


### TGM-NA SMD Package



DIMENSIONS: Inch[mm]  
CO-PLANARITY: 0.004[0.10]

### Circuit Diagram



### Electrical Specifications @ 25°C

Operating Temp: -40 to +85°C  
Pri Pins: 1-3  
Pri OCL: 500μH typ  
Pri DCR: 0.8Ω

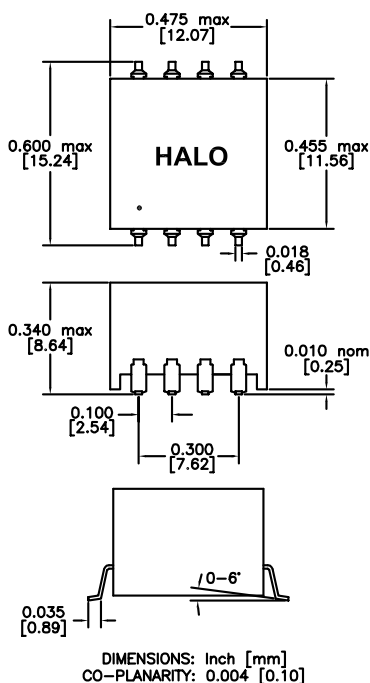
Patented Construction  
US Pat Nbrs: 5,656,985

| Part Number | Turns Ratio (±3%) | ET Constant | Isolation |
|-------------|-------------------|-------------|-----------|
| SMD         | PRI:SEC           | V-us min.   | Vrms      |
| TGM-310NARL | 2CT:1CT           | 11          | 3,000     |
| TGM-320NARL | 8CT:3CT           | 11          | 3,000     |
| TGM-330NARL | 4CT:3CT           | 11          | 3,000     |
| TGM-340NARL | 3CT:4CT           | 11          | 3,000     |
| TGM-350NARL | 1CT:1CT           | 11          | 3,000     |
| TGM-360NARL | 1CT:2CT           | 11          | 3,000     |
| TGM-380NARL | 3CT:8CT           | 11          | 3,000     |

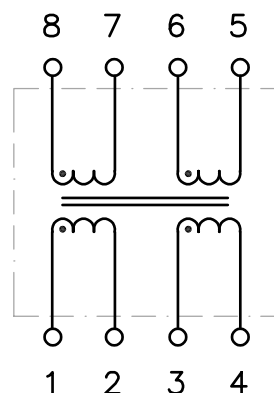
The TGM-NF, reinforced insulation, 8 pin transformers provide the isolation and voltage outputs required for low cost DC/DC converter circuits. UL1950, IEC950 and EN60950 recognized. Designed specifically for use with the Maxim™ MAX253 and MAX845 monolithic oscillator/power drivers with 3.3V or 5V power source. Smaller packages are available for lower isolation voltage applications. For more information, pertaining to the MAX845 please contact Maxim at (408) 737-7600. Maxim is a registered trademark of Maxim Integrated Products.



### NF Package



### Circuit Diagram



### Electrical Specifications @ 25°C

|                         |              |
|-------------------------|--------------|
| Operating Temp:         | -40 to +85°C |
| Pri DCR:                | 0.8Ω         |
| Pri OCL (1-4, tie 2-3): | 500μH typ    |

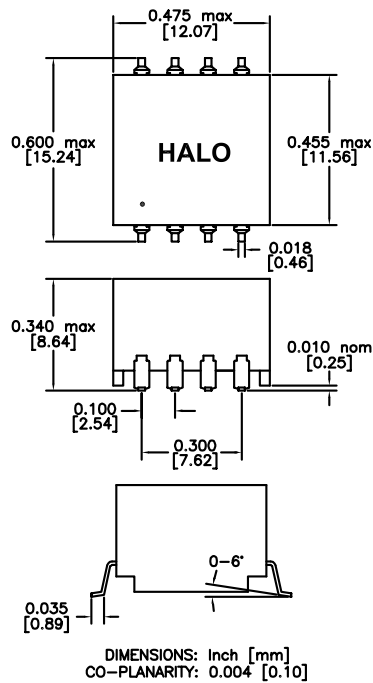
Patented Construction  
US Pat Nbrs: 5,656,985

| Part Number | Turns Ratio (±3%) | ET Constant         | Isolation |
|-------------|-------------------|---------------------|-----------|
|             | PRI:SEC           | V <sub>μs</sub> Min | Vrms      |
| TGM-410NF   | 2CT:1CT           | 18                  | 4,500     |
| TGM-420NF   | 8CT:3CT           | 18                  | 4,500     |
| TGM-430NF   | 4CT:3CT           | 18                  | 4,500     |
| TGM-440NF   | 3CT:4CT           | 18                  | 4,500     |
| TGM-450NF   | 1CT:1CT           | 18                  | 4,500     |

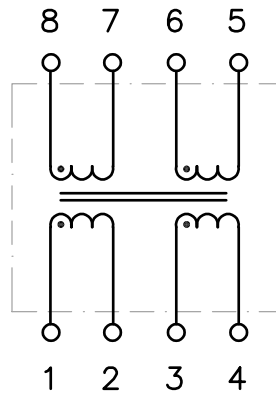
The TGM-NF, reinforced insulation, 8 pin transformers provide the isolation and voltage outputs required for low cost DC/DC converter circuits. UL1950, IEC950 and EN60950 recognized. Designed specifically for use with the Maxim™ MAX253 and MAX845 monolithic oscillator/power drivers with 3.3V or 5V power source. Smaller packages are available for lower isolation voltage applications. For more information, pertaining to the MAX845 please contact Maxim at (408) 737-7600. Maxim is a registered trademark of Maxim Integrated Products.



### NF Package



### Circuit Diagram



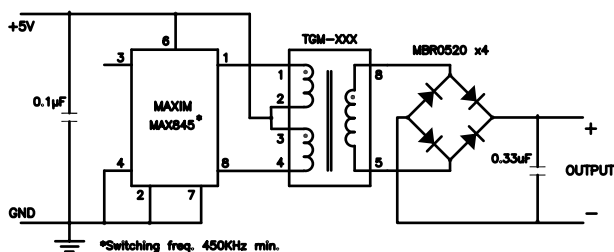
Electrical Specifications @ 25°C  
Operating Temp: -40 to +85°C  
Pri DCR: 0.8Ω  
Pri OCL (1-4, tie 2-3): 500μH typ

Patented Construction  
US Pat Number: 5,656,985

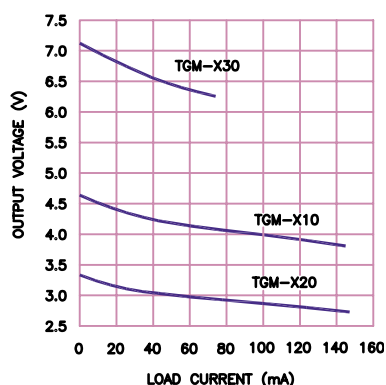
| Part Number | Turns Ratio (±3%)<br>PRI:SEC | ET Constant<br>V <sub>μs</sub> Min | Isolation<br>Vrms |
|-------------|------------------------------|------------------------------------|-------------------|
| TGM-410NFRL | 2CT:1CT                      | 11                                 | 4,500             |
| TGM-420NFRL | 8CT:3CT                      | 11                                 | 4,500             |
| TGM-430NFRL | 4CT:3CT                      | 11                                 | 4,500             |
| TGM-440NFRL | 3CT:4CT                      | 11                                 | 4,500             |
| TGM-450NFRL | 1CT:1CT                      | 11                                 | 4,500             |

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.

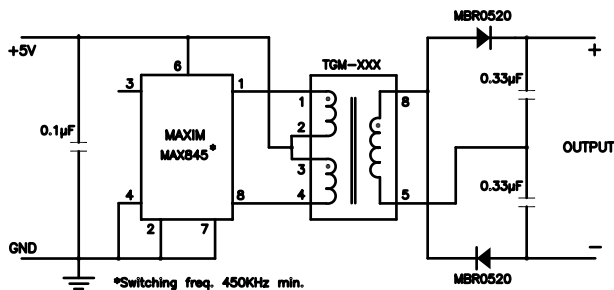
### Bridge Rectifier Circuit



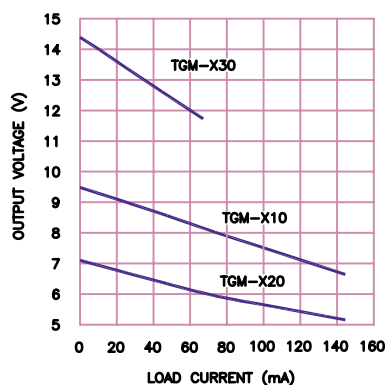
### Output Voltages



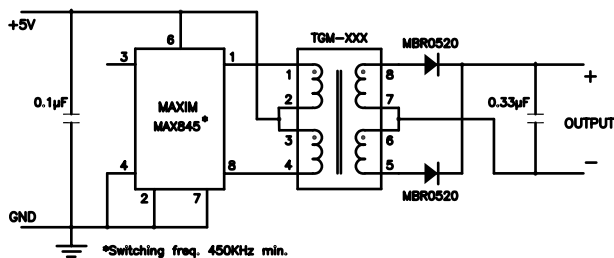
### Doubler Circuit



### Output Voltages



### Full Wave Rectifier Circuit



### Output Voltages

