# PCMCIA DC/DC Converter

Low Profile SMD Isolation Modules













### **Product Features:**

- The TGM-P3 series of 8 pin transformers provide the isolation and voltage outputs required for small, low cost DC/DC converter circuits.
- Designed specifically for use with the Maxim™ MAX845 monolithic oscillator/power drivers with 3.3V or 5V power source.
- DIL and SMD packages are also available with isolation voltages up to 4.5KVrms.
- Operating Temp: -40 to +85°C

1

2

3

4

Part Number	Circuit	Turns Ratio (±3%) PRI : SEC	Cw/w (pF Max.)	PRI LL (µH Typ.)	Isolation Vrms
TGM-010P3RL	А	1:1:1	12	0.40	500
TGM-020P3RL	А	1:1:0.75	12	0.40	500
TGM-030P3RL	А	1:1:1.5	12	0.40	500
TGM-040P3RL	В	1:1:1.3:1.3	12	0.40	500
TGM-050P3RL	В	1:1:1:1	12	0.40	500

### Notes:

- PRI Pins: 1-2 & 3-4

1

2

3

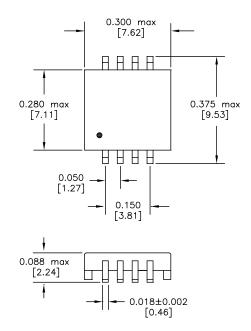
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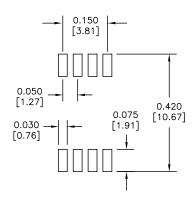
PRI DCR: 0.6Ω Max.
PRI OCL: 240μH Typ.
ET Constant: 5.5 V-μs Min.
For more large la Maxim Integrated Products.

# Schematic A Schematic B 5 5 8 7 6 8 6 0 0 Q Q Q

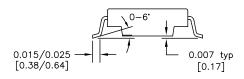
### PCMCIA DC/DC Converter Isolation Modules

### Package P3





Recommended Solder Pad Dimensions



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

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

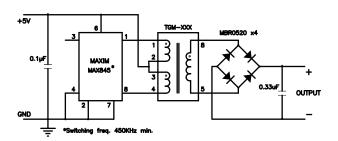
www.haloelectronics.com

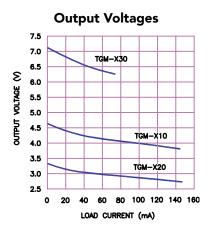
HALO® Electronics is a leading supplier of high quality communication magnetics including signal transformers, filters, CMR chokes, PoE power transformers, DC/DC converters, and integrated Ethernet connectors. HALO's leading edge technology solutions are manufactured in ISO9001 and ISO14001 factories offering high quality products at a competitive price.

# Maxim<sup>™</sup> MAX845 DC/DC Converter Application Note

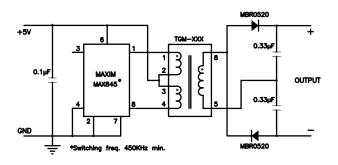
The TGM series of transformers have been designed specifically for use with the Maxim™ MAX845 monolithic oscillator/power driver with 3.3V or 5V power source. Multiple output voltages can be achieved depending on the diode circuit and transformer selected. For more information, pertaining to the MAX845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

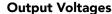
### **Bridge Rectifier Circuit**

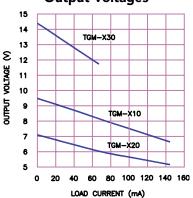




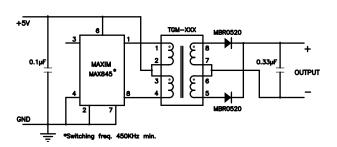
#### **Doubler Circuit**



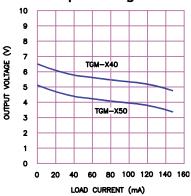




### **Full Wave Rectifier Circuit**



#### **Output Voltages**





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