

# PCMCIA DC/DC Transformers



Low Profile SMD Isolation Modules for DC/DC Converters



TGM-P3RL pictured above

## Product Features:

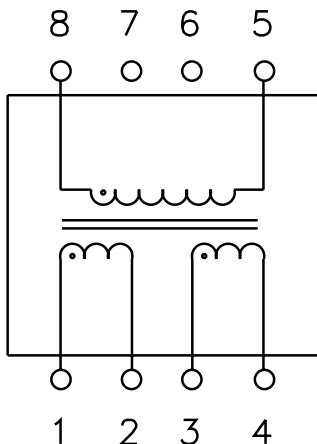
- The TGM-P3 series of 8 pin transformers provide the isolation and voltage outputs required for small, low cost DC/DC converter circuits.
- Designed specifically for use with the Maxim™ MAX845 monolithic oscillator/power drivers with 3.3V or 5V power source.
- DIL and SMD packages are also available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

Part Number	Circuit	Turns Ratio (±3%) PRI : SEC	Cw/w (pF Max.)	PRI OCL (µH Typ.)	Isolation (Vrms)	RoHS
TGM-010P3RL	A	1:1:1	17	240	500	RoHS (7a)
TGM-010P3LF	A	1:1:1	17	150	1500	Pb-Free
TGM-020P3RL	A	1:1:0.75	15	240	500	RoHS (7a)
TGM-020P3LF	A	1:1:0.75	15	150	1500	Pb-Free
TGM-030P3RL	A	1:1:1.5	19	240	500	RoHS (7a)
TGM-030P3LF	A	1:1:1.5	21	150	1500	Pb-Free
TGM-040P3RL	B	1:1:1.33:1.33	22	240	500	RoHS (7a)
TGM-040P3LF	B	1:1:1.33:1.33	28	150	1500	Pb-Free
TGM-050P3RL	B	1:1:1:1	21	240	500	RoHS (7a)
TGM-050P3LF	B	1:1:1:1	23	150	1500	Pb-Free

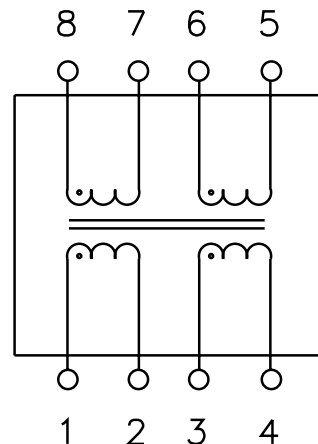
### Notes:

- PRI Pins: 1-2 & 3-4
- PRI DCR: 0.6Ω max.
- ET Constant: 5.5 V-µs min.
- Pb-Free parts are RoHS 6/6 compliant. RoHS (7a) products contain lead per exemption 7a which will expire in the future.
- Parts with LF suffix are recommended for new designs.
- Maxim is a registered trademark of Maxim Integrated Products.

### Circuit A



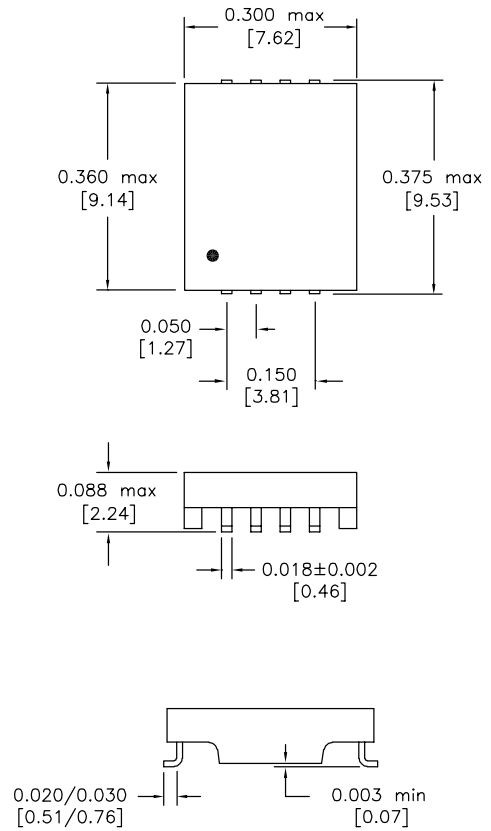
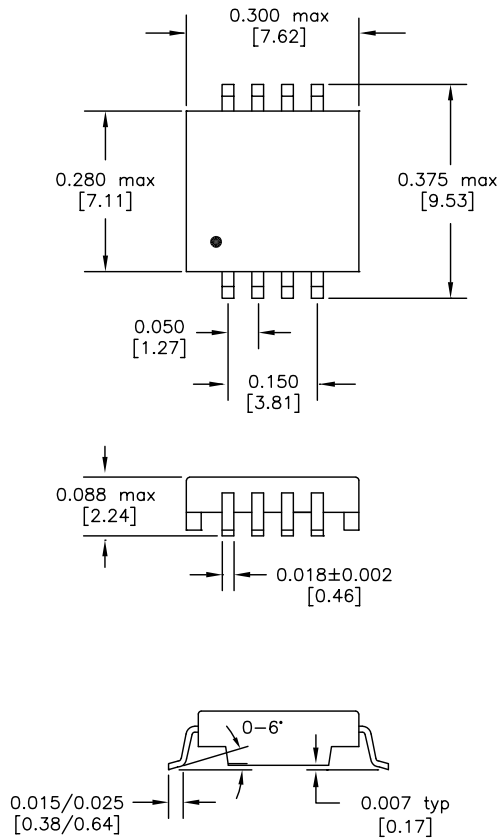
### Circuit B



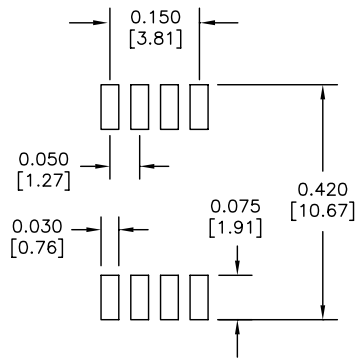
# PCMCIA DC/DC Converter Isolation Modules

## Package P3 (RL Suffix)

## Package P3 (LF Suffix)



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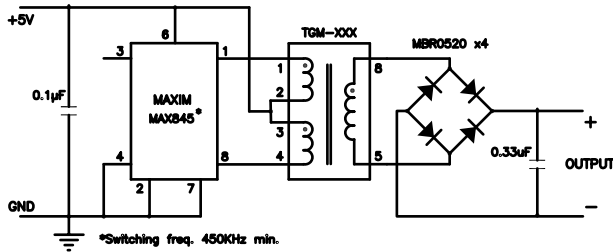
[www.haloelectronics.com](http://www.haloelectronics.com)

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.

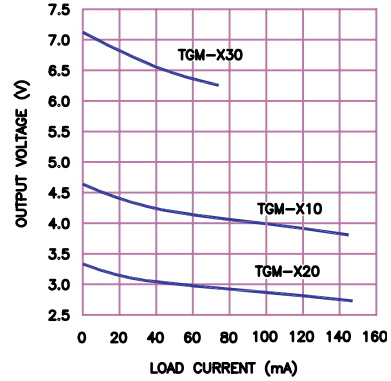
# Maxim™ MAX845 DC/DC Converter Application Note

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.

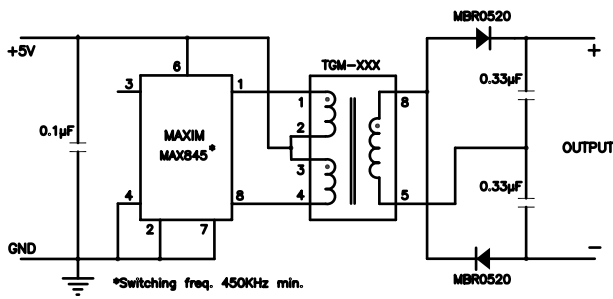
## Bridge Rectifier Circuit



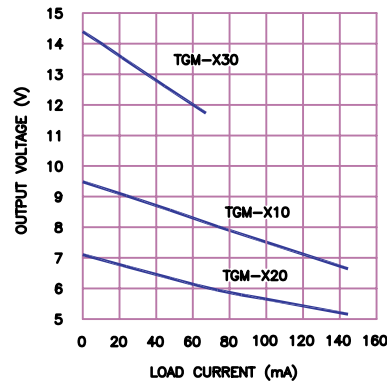
## Output Voltages



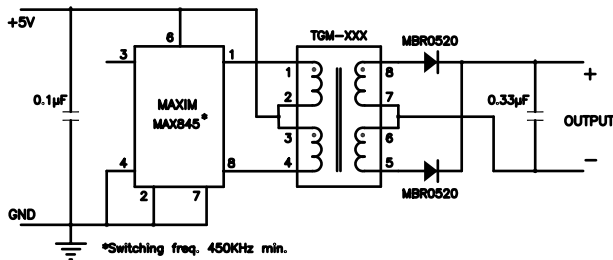
## Doubler Circuit



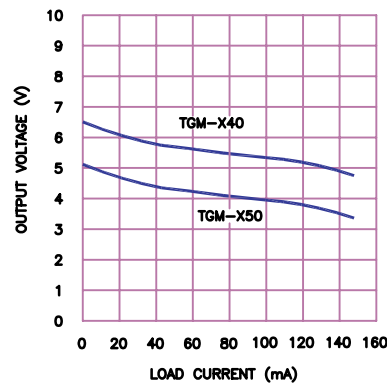
## Output Voltages



## Full Wave Rectifier Circuit



## Output Voltages



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