

The TGRTI-V6LF series of reinforced insulation transformers provides the isolation and voltage outputs required for low cost DC/DC converter circuits. Designed specifically for the Texas Instruments™ ISO721 and ISO722 high-speed digital isolator applications. UL60950, IEC60950, EN60950 and DEMKO recognized. Fully ROHS compliant and "Green". Other packages are available with isolation voltages ranging from 500 to 4.5kVrms.



V6 SMD Package



Circuit Diagram



Pri Pins: 1-3  
 Operating Temp: -40 to +85°C

Electrical Specifications @ 25°C

Part Number	Turns Ratio +/-3%	OCL Typ.	PRI DCR	ET Constant	Isolation
SMD	PRI : SEC	$\mu$ H	$\Omega$ Max	V- $\mu$ s Min.	Vrms
TGRTI-310V6LF	1CT:0.5CT	500	0.8	18	3,000
TGRTI-320V6LF	1CT:0.375CT	500	0.8	18	3,000
TGRTI-330V6LF	1CT:0.75CT	500	0.8	18	3,000
TGRTI-340V6LF	1CT:1.33CT	800	0.9	22	3,000
TGRTI-350V6LF	1CT:1CT	800	0.9	22	3,000

The TGRTI-NA series, reinforced insulation, 6 pin transformers provide the isolation and voltage outputs required for low cost DC/DC converter circuits. Designed specifically for the high voltage isolation DC/DC converters in Texas Instruments ISO721 and ISO722 high-speed digital isolator applications. UL60950, IEC60950, EN60950 and DEMKO recognized. Other packages are available with isolation voltages ranging from 500 to 4.5kVrms.



### NA SMD Package



### Circuit Diagram



NOT RECOMMENDED FOR NEW DESIGNS

### Electrical Specifications @ 25°C

Operating Temp: -40 to +85°C  
Pri Pins: 1-3  
Pri OCL: 960µH typ.  
Pri DCR: 0.8  
E T Constant: 15 V-µs min.

### Patented Construction

US Pat Nbrs: 5,656,985 6,297,721 B1  
6,297,720 B1 6,320,489 B1  
6,344,785 B1 6,662,431 B1

Part Number SMD	Turns Ratio +/-3% PRI : SEC	Isolation Vrms
TGRTI-310NA	1CT:0.5CT	3,000
TGRTI -320NA	1CT:0.375CT	3,000
TGRTI -330NA	1CT:0.75CT	3,000
TGRTI -340NA	1CT:1.33CT	3,000
TGRTI -350NA	1CT:1CT	3,000

The TGRTI-NA series, reinforced insulation, 6 pin transformers provide the isolation and voltage outputs required for low cost DC/DC converter circuits. Designed specifically for the high voltage isolation DC/DC converters in Texas Instruments ISO721 and ISO722 high-speed digital isolator applications. UL60950, IEC60950, EN60950 and DEMKO recognized. Other packages are available with isolation voltages ranging from 500 to 4.5kVrms.



### NA SMD Package



### Circuit Diagram



NOT RECOMMENDED FOR NEW DESIGNS

### Electrical Specifications @ 25°C

Operating Temp: -40 to +85°C  
 Pri Pins: 1-3  
 Pri OCL: 960µH typ.  
 Pri DCR: 0.8  
 E T Constant: 11 V-µs min.

### Patented Construction

US Pat Nbrs: 5,656,985 6,297,721 B1  
 6,297,720 B1 6,320,489 B1  
 6,344,785 B1 6,662,431 B1

Part Number SMD	Turns Ratio +/-3% PRI : SEC	Isolation Vrms
TGRTI-310NARL	1CT:0.5CT	3,000
TGRTI -320NARL	1CT:0.375CT	3,000
TGRTI -330NARL	1CT:0.75CT	3,000
TGRTI -340NARL	1CT:1.33CT	3,000
TGRTI -350NARL	1CT:1CT	3,000

## Typical Applications

### Isolated 3.3-V CAN Interface



## Typical Applications

### Isolated 3.3-V 485 Half-Duplex Interface

