

## 6W LMT3811 42.5:1 Transformer

### DESCRIPTION

This document describes and specifies the electrical and mechanical characteristics of the SGE2643-3G high voltage transformer for CCFL inverter power supplies. SGE2643-3G is the RoHS compliant and Lead free transformer. For Reliability and Safety Specification, refer to SGE2606-2.

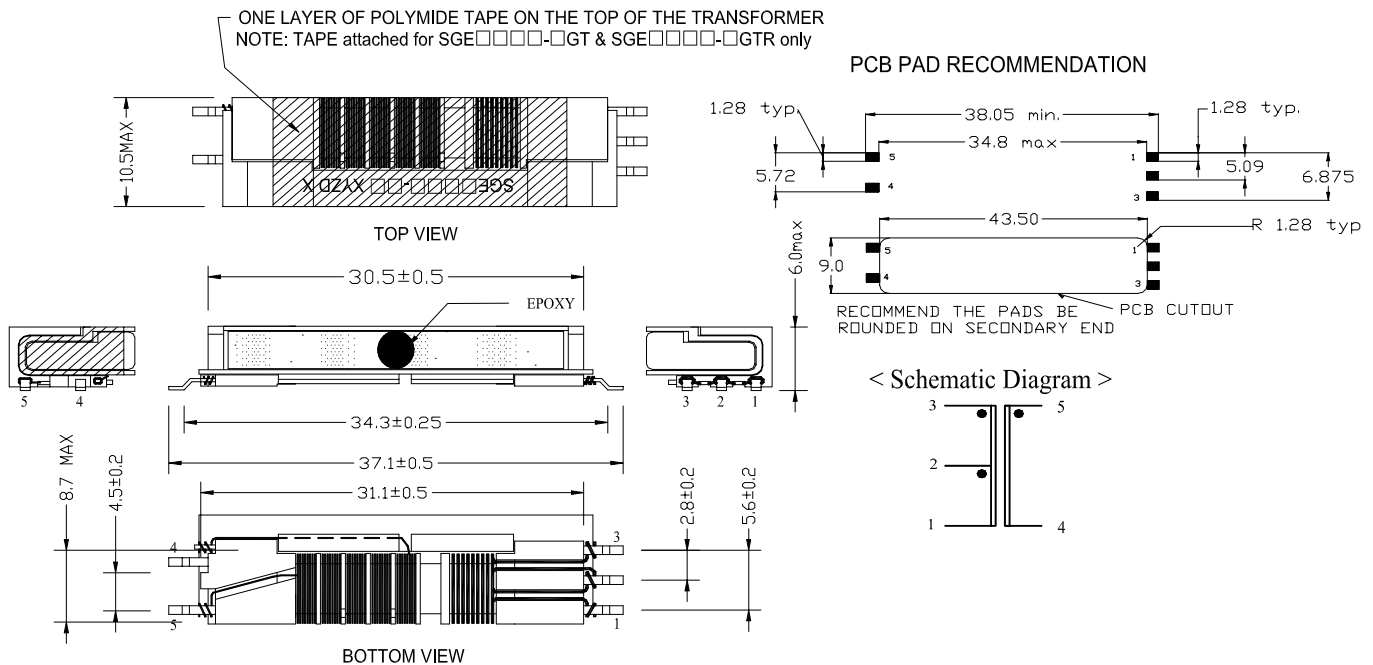
### ELECTRICAL CHARACTERISTICS

Items	Inductance (@ 10KHz, 0.1V)			Items	DC. Resistance		
	Min	Nom	Max		Min	Nom	Max
L1-2, L2-3 (μH)	124	144	168	R <sub>DC</sub> 1-2, R <sub>DC</sub> 2-3(mΩ)	170	190	210
L4-5 (mH)	890	1012	1210	R <sub>DC</sub> 4-5 (Ω)	405	415	430
L <sub>LKG1-2</sub> , L <sub>LKG2-3</sub> (μH)	Inductance (@ 100KHz, 1V)			R <sub>DC</sub> 1-2 / R <sub>DC</sub> 2-3	0.96	1	1.04
	14.7	15.7	16.7				
L <sub>LKG4-5</sub> (mH)	NA	NA	NA	<b>Secondary Self Capacitance</b> ( HP4192A 1MHz C meter, 30mVrms)			
				C <sub>4.5</sub> (pF)	2.0	2.5	3.0
Rating				Dielectric Voltage Withstand			
Note: Max output power varies depend on operating condition.				60Hz, Arc-detect enabled, 5 sec. min. 200μA max. leakage current			
Max Open Output Voltage	2000V <sub>RMS</sub> , 3sec.			Secondary to Core	2500V <sub>RMS</sub> min. ( 60sec)		
Max Output Voltage	1100V <sub>RMS</sub>			Primary to Core	1000V <sub>RMS</sub> min.		
Max Output Power	6W			Primary to Secondary	2500V <sub>RMS</sub> min.		

### WINDING SPECIFICATIONS

	Primary		Secondary
	Pin 1 – 2	Pin 2 – 3	Pin 4 – 5
Winding Sequence	2S – 1F	3S – 2F	5S – 4F
Wire Size & Type	#35x2, Single Insulation, 180°C	#35x2, Single Insulation, 180°C	#46, Triple Insulation, 180°C
Number of Turns	20	20	1700
Winding Method	Bifilar		Skip sector 1. ( Empty)

### PHYSICAL SPECIFICATIONS & WIRING DIAGRAM



### PART MARKING

**SGE□□□□-□G XYZD A** – SGE2643-3G: MSC PN, XYZ: Datecode (X:YR, YZ=WK), D: Plant Code, A: Rev.#

### PACKAGING SPEC AND ORDER INFORMATION

**Packaging Order Information** – SGE2643-3G ( Standard for TRAY)  
 SGE2643-3GTR (Tape and Reel )  
 SGE2643-3GT (with Polyimide Tape for TRAY)

**TAPE & REEL** : Refer to SGE2604-4 specification



**Microsemi**<sup>®</sup>

Specification Number  
**SGE2643-3G**  
Revision. A (082905)

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**NOTES**

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