

## 4W LMT2110 42.1:1 Transformer

### DESCRIPTION

This document describes and specifies the electrical and mechanical characteristics of the SGE2689-1G high voltage transformer for CCFL inverter power supplies. SGE2689-1G is the RoHS compliant and Lead free transformer. For Reliability and Safety Specification, refer to SGE2606-3.

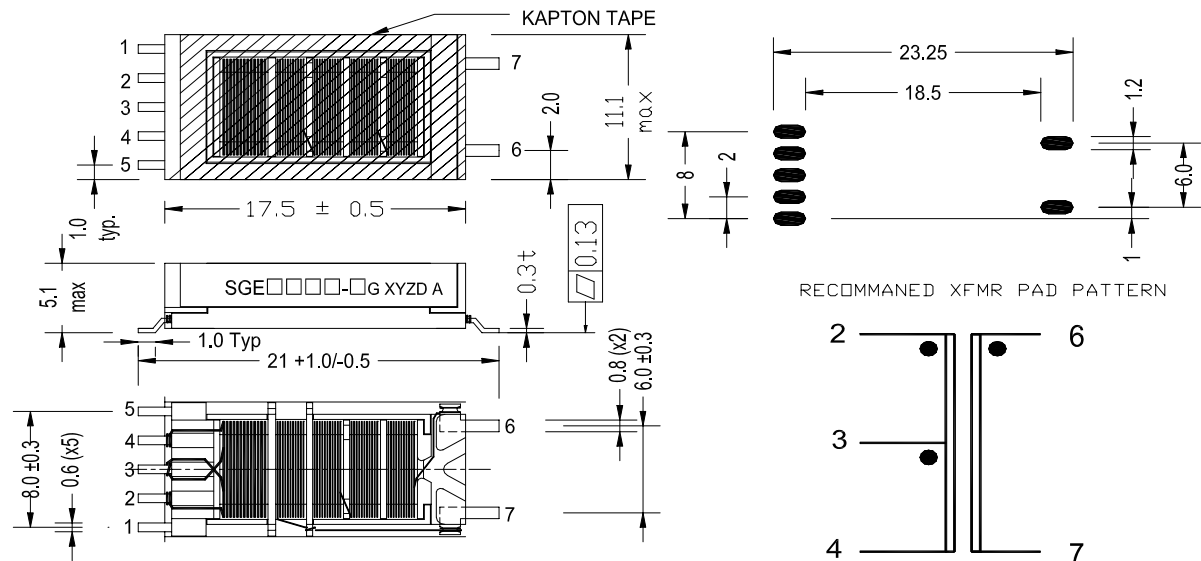
### ELECTRICAL CHARACTERISTICS

Items	Inductance (@ 10KHz, 0.1V)			Items	DC. Resistance		
	Min	Nom	Max		Min	Nom	Max
L2-3, L3-4 (μH)	157	185	214	R <sub>DC</sub> 2-3, R <sub>DC</sub> 3-4(mΩ)	200	215	230
L6-7 (mH)	1024	1213	1396	R <sub>DC</sub> 6-7 (Ω)	350	361	390
L <sub>LKG</sub> 2-3, L <sub>LKG</sub> 3-4 (μH)	Inductance (@ 100KHz, 1V)			R <sub>DC</sub> 2-3 / R <sub>DC</sub> 3-4	0.96	1	1.04
	10	11	12				
L <sub>LKG</sub> 6-7 (mH)	NA	NA	NA	<b>Secondary Self Capacitance</b> ( HP4192A 1MHz C meter, 30mVrms)			
				C <sub>6-7</sub> (pF)	2.0	2.5	3.5
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	1500V <sub>RMS</sub> , 3sec.			Secondary to Core	2000V <sub>RMS</sub> min. ( 60sec)		
Max Output Voltage	1000V <sub>RMS</sub>			Primary to Core	1000V <sub>RMS</sub> min.		
Max Output Power	4W			Primary to Secondary	1000V <sub>RMS</sub> min.		

### WINDING SPECIFICATIONS

	Primary		Secondary
	Pin 2 – 3	Pin 3 – 4	Pin 6 – 7
Winding Sequence	2S – 3F	3S – 4F	6S – 7F
Wire Size & Type	#33, Single Insulation, 180°C	#33, Single Insulation, 180°C	#46, Triple Insulation, 180°C
Number of Turns	19	19	1600
Winding Method	Bifilar		

### PHYSICAL SPECIFICATIONS & WIRING DIAGRAM



Note : This Transformer is designed for single ended application. Pin 7 must be connected to low voltage side or ground.

### PART MARKING

**SGE□□□□-□G XYZD A** – SGE2689-1G: MSC PN, XYZ: Datecode (X:YR, YZ=WK), D: Plant Code, A: Rev.#

### PACKAGING SPEC AND ORDER INFORMATION

**Packaging Order Information** – SGE2689-1G ( Standard for TRAY)

SGE2689-1GTR (Tape and Reel )

**TAPE & REEL** : Refer to SGE2604-3 specification



**Microsemi**<sup>®</sup>

Specification Number  
**SGE2689-1G**  
Revision. A (090605)

**4W LMT2110 42.1:1 Transformer**

**NOTES**

PRODUCTION DATA – Information contained in this document is proprietary to Microsemi and is current as of publication date. This document may not be modified in any way without the express written consent of Microsemi. Product processing does not necessarily include testing of all parameters. Microsemi reserves the right to change the configuration and performance of the product and to discontinue product at any time.