

## 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.

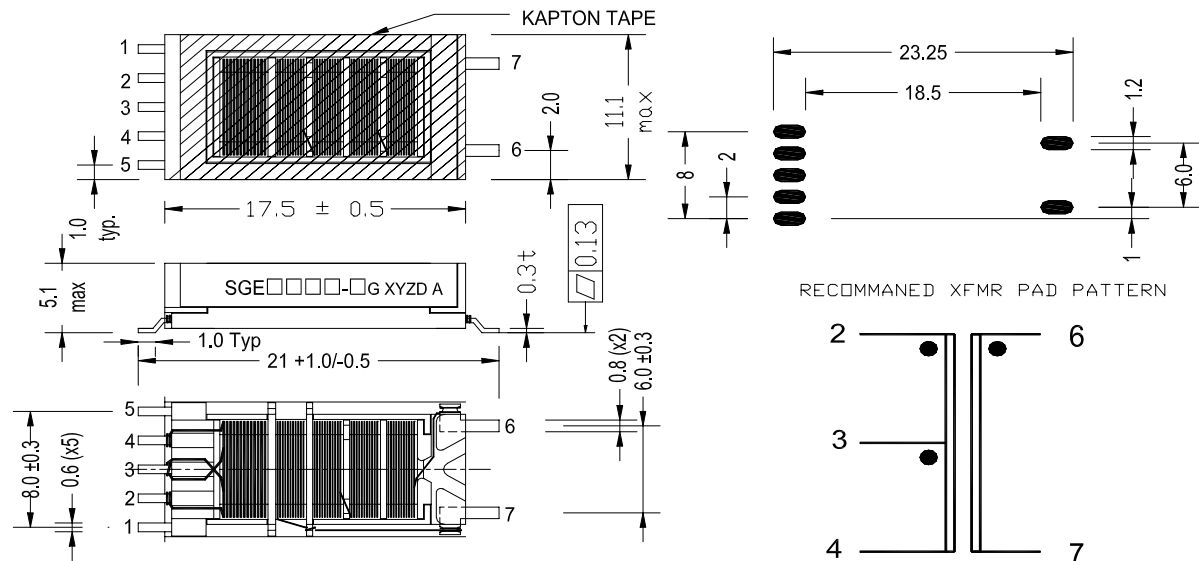
### ELECTRICAL CHARACTERISTICS

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	Secondary Self Capacitance ( 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



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

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**NOTES**

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