

CUSTOMER _____

CUSTOMER' S P/N _____

DESCRIPTION Toroidal Coil common-mode inductor

SGTE PART NO. GT251512-5mH

SAMPLE NO. S220416022 REVISION NO. A3 DATE 2024/6/18

SPECIFICATION FOR APPROVAL

FULLY APPROVED	REVISE APPROVED

SGTE 感通科技

深圳感通科技有限公司（大陸工廠）

GANTONG TECHNOLOGY (SHENZHEN) CO., LTD.

深圳市平湖街道平湖村萬福路26號

No. 26 Wan fu Road, Ping hu Village. Ping hu town, Shenzhen City.

Tel: 0755-28457600

Fax: 0755-28452952

感通科技有限公司（台灣辦事處）

臺北縣汐止市新台5路一段77號10樓之7

10F~7, NO. 77, Sec. 1, Hsin Tai 5 Road, Shi-chi City, Taipei.

Tel: 886-2-8698-2341

Fax: 886-2-8698-2342

納美科技股份有限公司（香港辦事處）

LAPEE TECHNOLOGY LIMITED

香港九龍尖沙嘴加連威老道嘉蘭圍5-11號利時商業大廈17樓1713室

Room 1713 17/F, Rise Commercial Bldg 5-11 Granville Cri cuit, Granville Rd, TSim Sha Tsui., Kln

Tel: 852-25301111

Fax: 852-25371111

<http://www.szgte.com>

SPECIFICATION

**RoHS
COMPLIANT**

Customers Part Number	Item Name	Date	
	Toroidal Coil common-mode inductor	2024/6/18	
Gan Tong Part NO.	Sample NO.	Revision No.	A3
GT251512-5mH	S220416022	Page	5

Version	Change history	Before the change	After the change	Release date
A0	NEW	—	—	2022/4/15
A1		D:6.0±2.0	D:3.5±0.5	2022/12/7
A1		E:17.5±0.5	E:18.0±0.5	2022/12/7
A1		F:16.5±0.5	F:16.0±0.5	2022/12/7
A1		无耐压要求	HI-POT:N1-N2 1000VAC/2mA/1SEC/50Hz	2022/12/7
A1		测试条件: 1KHz/0.3V,内阻20Ω	测试条件: 1KHz/0.3V,内阻100Ω	2022/12/7
A2		L (1-2)=(4-3):5mh Min.	L (1-2)=(4-3): 5mh~8mh	2023/10/8
A3	Add baffle mark	unmarked	Add "PCB thickness 3mm" label	2024/6/18

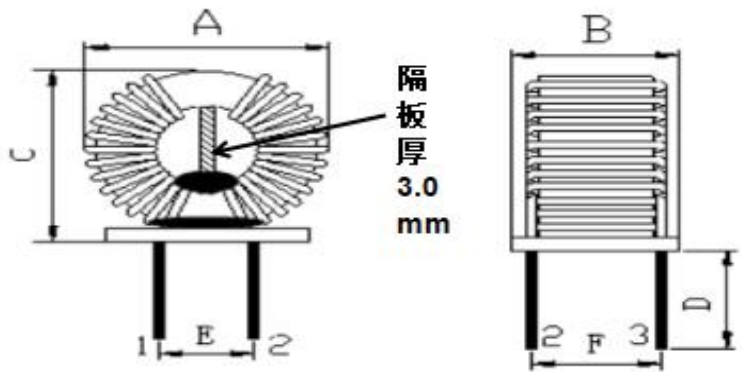
DRAWN BY	CHECKED BY	APPROVED BY
黄荣英	王康	田一

SPECIFICATION

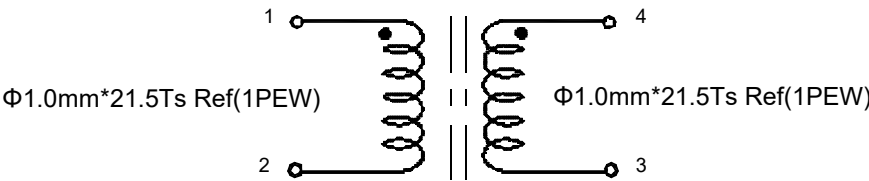
**RoHS
COMPLIANT**

Customers Part Number	Item Name	Date	
	Toroidal Coil common-mode inductor	2024/6/18	
Gan Tong Part NO.	Sample NO.	Revision No.	A3
GT251512-5mH	S220416022	Page	1-5

MECHANICAL & DIMENSIONS



(UNIT: mm)	
A	32.5Max
B	23.0 Max
C	32.5Max
D	3.5±0.5
E	18.0±0.5
F	16.0±0.5



ELECTRICAL REQUIREMENTS:

PARAMETER	SPECIFICATION	CONDITION	TEST INSTRUMENTS
L (1-2) =(4-3)	5~8 mH	1KHz/0.3V, 内阻100Ω	VR-115
DCR(1-2) =(4-3)	38 mΩ (Max)	@ 25°C	VR-131
HI-POT(N1-N2)	1000V AC	2mA/1SEC/50Hz	

·All test Data is referenced to 25°C ambient.
 ·Operating Temperature Range: -25°C to +85°C.

SPECIFICATION

RoHS
COMPLIANT

Customers Part Number	Item Name	Date	
	Toroidal Coil common-mode inductor	2024/6/18	
Gan Tong Part NO.	Sample NO.	Revision No.	A3
GT251512-5mH	S220416022	Page	2-5

MATERIAL LIST

NO	Material	Specification	Supply's name	Remark
1	Core	T25*15*12-C R10K or equivalent	ZR/FSY	
2	Wire	Φ1.0mm×1P×21.5Ts Ref (PEW/180°C)	SG	
3	Solder	Sn99.3-Cu0.7	CS	
4	Epoxy Substrate	14.6*12.5*3.0MM	JT	
		24*21.5*1.6mm/18*16*1.3mm4孔		
5	Epoxy	602H-(HF)单组份	HL	

SPECIFICATION

**RoHS
COMPLIANT**

Customers Part Number	Item Name	Date	
	Toroidal Coil common-mode inductor	2024/6/18	
Gan Tong Part NO.	Sample NO.	Revision No.	A3
GT251512-5mH	S220416022	Page	3-5

ELECTRONICAL TEST DATA			OREALL DIMENSTON (UNIT: mm)						
	L (mH)	DCR (mΩ)		A	B	C	D	E	F
SPEC	5Min	38 Max		32.5 Max	23.0 Max	32.5 Max	3.5±0.5	18.0±0.5	16.0 ±0.5
1	6.91	23.30		29.4	22.06	28.8	3.51	18.02	16.05
2	6.38	23.10		29.2	22.08	29.2	3.52	18.01	16.1
3	7.25	23.30		29.6	22.1	28.9	3.52	18.03	16.12
4	7.51	23.40		29.5	22.05	29.3	3.56	18.01	16.05
5	6.85	23.10		29.3	22.07	29	3.51	18.06	16.05
\bar{X}	6.98	23.24		29.4	22.072	29.04	3.52	18.03	16.07
R	4.91	0.3		0.4	0.05	0.5	0.05	0.05	0.07

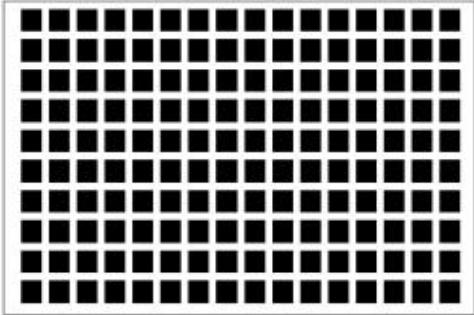
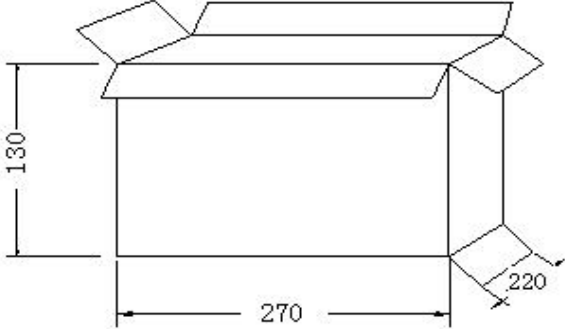
TEMPERATURE 25 °C , HUMIDITY 75%

SPECIFICATION

RoHS
COMPLIANT

Customers Part Number	Item Name	Date	
	Toroidal Coil common-mode inductor	2024/6/18	
Gan Tong Part NO.	Sample NO.	Revision No.	A3
GT251512-5mH	S220416022	Page	4-5

PACKAGING

1. 吸塑盒包装: 型号30格吸塑盒 (一盘30PCS);	
2. 小箱尺寸: 270*220*130mm (以实际包装数量为准) 材质A3A;	

注 : 包装数量以实际包装为准, 可按客户要求调整。

Storage

1. Temperature and humidity conditions: Less than 40°C and 70% RH.
2. Recommended products should be used within 6 months form the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.

Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

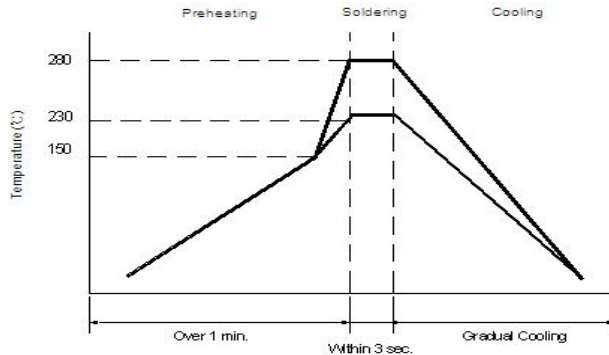
SPECIFICATION

RoHS
COMPLIANT

Customers Part Number	Item Name	Date	
	Toroidal Coil common-mode inductor	2024/6/18	
Gan Tong Part NO.	Sample NO.	Revision No.	A3
GT251512-5mH	S220416022	Page	5-5

SOLDING CONDITIONS

. Hand Soldering



/Surface Mount Type Power Inductors

Item	Specification	Conditions															
Solderability	More than 90% of the terminal electrode should be covered with solder.																
Solder Heat Resistance	Inductance within $\pm 20\%$ of initial value and appearance shall not break.																
Heat resistance	Inductance within $\pm 20\%$ of initial value. No disconnection or short circuit. Appearance shall not break.	After 500 \pm 12 hours in 85 \pm 5 $^{\circ}$ C and 2 hour drying under normal condition.															
Cold resistance	Inductance within $\pm 20\%$ of initial value. No disconnection or short circuit. Appearance shall not break.	After 500 \pm 12 hours in -25 \pm 2 $^{\circ}$ C and 2 hour drying under normal condition.															
Thermal shock	Inductance within $\pm 20\%$ of initial value. No disconnection or short circuit. Appearance shall not break.	After 10 cycles of following condition. <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th>Step</th> <th>Temperature ($^{\circ}$C)</th> <th>Times (min.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25\pm2</td> <td>30</td> </tr> <tr> <td>2</td> <td>Room Temperature</td> <td>Within 3</td> </tr> <tr> <td>3</td> <td>85\pm5</td> <td>30</td> </tr> <tr> <td>4</td> <td>Room Temperature</td> <td>Within 3</td> </tr> </tbody> </table>	Step	Temperature ($^{\circ}$ C)	Times (min.)	1	-25 \pm 2	30	2	Room Temperature	Within 3	3	85 \pm 5	30	4	Room Temperature	Within 3
Step	Temperature ($^{\circ}$ C)	Times (min.)															
1	-25 \pm 2	30															
2	Room Temperature	Within 3															
3	85 \pm 5	30															
4	Room Temperature	Within 3															
Humidity Resistance	Inductance within $\pm 20\%$ of initial value. No disconnection or short circuit. Appearance shall not break.	After 500 \pm 12 hours in 25 \pm 2 $^{\circ}$ C and 90 to 95% humidity , and 2 hour drying under normal condition.															
* Vibration Test	Inductance within $\pm 20\%$ of initial value and appearance shall not break.	After vibration for 1hour, In each of three orientations at sweep vibration (10~55~10Hz) with 1.52mm P-P Amplitudes.															