

Customer: ACUWA

Customer's P/N:

LianZhen P/N: SCDS104R-101M-AC1W

Drew Date: 2021.04.14

APPROVAL STAMP

Please sign back within one week

上聯 振 電 子 (深 圳) 有 限 公 司 LIANZHEN ELECTRONICS (SHEN ZHEN) CO.,LTD.

8th Building, Yangbei Industrial Park, Huangtian Community, Hangcheng Street, Baoan District, Shenzhen City, Guangdong Province, PRC 深圳市寶安區航城街道黃田社區杨贝工業區第八棟 TEL:0755-27911508 27798793 FAX:0755-27918330 http:www.lianzhen.cn

FORM NO: EHFM-0810- GC-22 VERSION: 20090916-02 FILING: LONG TERM

ECN History List

		v				
VER.	Change Description	Date	Approved By	Checked By	Drawn By	



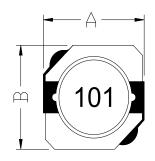
PART NUMBER	Inductance L0 (uH) ±20%	I _{RMS} (Amp) Typ	I _{SAT} (Amp) Typ	R_{DC} $(m\Omega)$ Max	
SCDS104R-101M-AC1W	100	1.2	1.2	300	

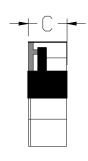
Note:

- *. Operating temperature -40°C \sim +125°C.
- *. Storage temperature -40 °C \sim +125 °C .
- *. All test data is referenced to 25° C ambient, Inductance value test Equipments: CH3302 or WK3255B or HP4284, R_{DC} test equipments CH16502.....
- *. Inductance value test condition Frequency 100KHz and 1.0Vrms at 25 $^{\circ}\mathrm{C}$
- *. $I_{\text{RMS}}\!\!:$ The current will cause the coil temperature rise approximately $40\,^{\circ}\!\text{C}$
- *. I_{SAT}: The current will cause L0 to drop approximately 30% typical



Mechanical Dimensions



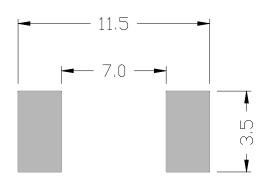


Item	mm
A	10.2±0.3
В	10.0±0.3
С	3.8±0.2
D	3.0±0.5
Е	1.2±0.5
F	7.7±0.5

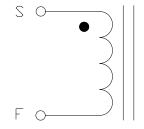
E -	-	F
<u> </u>		

*.Marking: 101

LAND PATTERN DIMENSIONS



SCHEMATIC





NO.	Item	Specification and Description			
1	Core	Ferrite Core			
2	Wire	2UEWH			
3	Solder	Sn99.3 Cu0.7(9930)			
4	Base	C104R-2 P1			
5	Ink	Black Ink(Resin)			
6	Adhesive	Ероху			

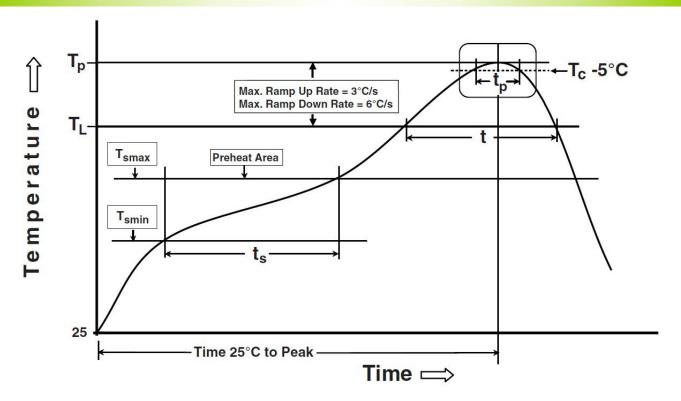




ITEMS	TEST CONDITION	SPECIFICATIONS	REFERENCES	
High temperature Storage	 Precondition is requirement +125 °C,1000hrs Measurements shall be taken at 0 (post preconditioning), 168hrs, 500hrs, 1000hrs. 	1.Inductance, RDC change rate is within +/-10%. 2.Appearance is ok for all	JESD22-A103 or MIL-STD-202 Method 108	
Low Temperature Storage	1. Preconditioning is required. 255 °C,1000hrs 3.Measurements shall be taken at 0 (post preconditioning), 168hrs, 500hrs, 1000hrs.	1.Inductance, RDC change rate is within +/-10%. 2.Appearance is ok for all	JESD22-A119	
Temperature Cycling	 Precondition is requirement -40°C/+125 °C, 1000 Cycles, 30 Minutes each extreme; Measurements shall be taken at 0 (post preconditioning), 250 cycles, 500 cycles, 1000 cycles. 	1.Inductance, RDC change rate is within +/-10%. 2.Appearance is ok for all	JESD22-A104 or MIL-STD-202 Method 107	
High Temperature Humidity (DampHeat-Steady State)	 Preconditioning is required. 85° C,85%RH, 1000hrs. Measurements shall be taken at 0 (post preconditioning), 168hrs, 500hrs, 1000hrs. 	1.Inductance, RDC change rate is within +/-10%. 2.Appearance is ok for all	JESD22-A101 or MIL-STD-202 Method 103	
Vibration	1. Frequency range: 10~2000Hz. 2. Amplitude: 1.5mm or 20 G 3. Sweep time and duration: 10~2000~10Hz for 20 minutes 4. Each four hours(12 times) in X,Y,Z direction: 12 hours in total	1.Inductance, RDC change rate is within +/-10%. 2.Appearance is ok for all	MIL-STD-202 Method 204 or JESD22B-103	
Resistance to Soldering Heat	DIP: 260+/-5°C, 10+/-1sec , 1 time, or IR Reflow: 250+/-5°C (component temp), 30 sec, 3 times or Peak temp 260°C +5°C,10sec,3time.	1.Inductance, RDC change rate is within +/-10%. 2.Appearance is ok for all. 3.No inner layer crack	MIL-STD-202 Method 210 or JESD22-B106 or J-STD-020	
Terminal Strength for SMD	 Preconditioning is required. With the component mounted on a PCB Apply 1.8kg force to the side of a device being tested. This force shall be applied for 60 +1 seconds. 	Inductance, RDC change rate is within +/-10%. Appearance is ok for all. No evidence of part being sheared off from its pad.	AEC-Q200-006	



Reflow Soldering Profile



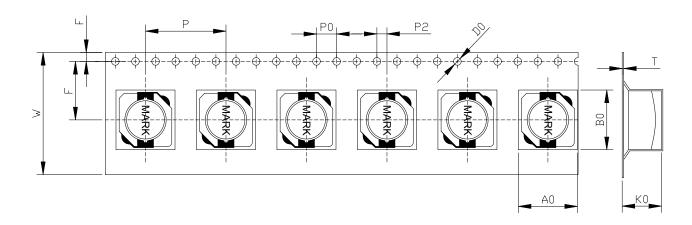
Classification Profile

	Profile Feature	Lead Free Soldering		
	Temperature Min.(Tsmin)	150°C		
Preheat and soak	Temperature Max.(Tsmax)	200°C		
	Time(Tsmin to Tsmax)(t _s)	60-120 Seconds		
Ramp-up rate (T _L	to Tp)	3℃/Second Max.		
Liquidous temperature (T _L)		217 °C		
Time (t _L) maintair	ned above T _L	60-150 Seconds		
Classification tem	perature (Tc)	260°C Max		
Time (t _P) within 5	°C of Tc	30 Seconds Max.		
Ramp-down rate (Tp to T _L)	6 °C/Second Max.		
Time 25 °C to peak temperature		8 Minutes Max.		
Recommended ref	low soldering temperature	245°C±5 °C		



Packaging information

Packaging Dimension:(mm)



W	A0	В0	K0	P	F	E	Р0	P2	D0	Т
24.0±0.3	10.6±0.3	10.8±0.3	4.3±0.3	16.0±0.2	11.5±0.2	1.75±0.2	4.0±0.2	2.0±0.2	Ø1.5±0.1	0.35±0.1

Cover tape & peeling force

Cover tape sealing method: Manufacturing-Defined



165° and 180°.

Note:

*.1000PCS/Reel

*.Storage condition:-5° $\mathbb{C}\sim+40$ ° \mathbb{C} , 20% to 70%RH