

Inspection Report

Report No:	KHT-20250422-042	Sales:	JAX	Department Of Application	Sales
Receipt Date:	2025-04-18	Test Date:	2025-04-18	Report Date:	2025-04-22
Inspector:	Wade	Approved by:	David	Approved by:	Jan Guo

Sample Information					
Part Number:	AOZ1280CI	Package Type:	SOT23	D/C:	25+
Package Carrier:	REEL	Manufacturer:	AOS	MSL:	1
Quantity Received:	2090pcs	Quantity Inspected:	5pcs	PO Number:	KTD2524219
Incoming information: The incoming goods are a section of tape ,there is no original packaging and original labeling .The packing and tape show no damage, no popping or other abnormal phenomena.					

Test Content			
Report Summary:	Details:	Risk Level:	
Inspection Items	Reference Standards	Results	Notes
1.External Visual Inspection			
1.1 Product Information	AS6081 IDEA-STD-1010-B	PASS	
1.2 Surface Analysis		PASS	
1.3 Pin Plating Analysis		PASS	
1.4 Aceton Inspection		PASS	
1.5 Device Dimension Measurement	Device Datasheet	PASS	
2.X-RAY Test			
2.1 X-Ray Internal Structure Inspection	GJB548B-2005	PASS	
3.Solderability Test			
3.1 Solderability Test	IPC J-STD-002D/2C	/	
4.De-cap Die Analysis			

4.1 De-cap Die Analysis	GJB 4027A-2006	/	
5.SEM & EDS Analysis			
5.1 Microstructure Analysis	JY/T 0584-2020	/	
5.2 Pin Material Analysis	GB/T 17359-2012	/	
6.RoHS Test			
6. 1 RoHS Test	RoHS Order	/	
7.IV Test/Electrical Performance Test			
7.1 IV Test/Electrical Performance Test	Datesheet	/	
8.XRF Analysis			
8.1 Coating Thickness Analysis	Datesheet	/	
9.C-SAM Analysis			
9.1 Ultrasonic Inspection	IPC/JEDEC J-STD-035:1999	/	

Conclusion and Suggestions	
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Conclusion:	Incoming 2090pcs for the same batch, the tape is intact; 5pcs were detected by sampling detection method, EVI passed, X-RAY test passed..
Suggestions:	

Notes and Disclaimers:

1. The report is invalid without the signature of the quality inspector and QC supervisor.
2. No part of this publication may be reproduced, altered or distributed publicly in any form or by any means without the prior written permission of Kehuite Technology Development Limited.
3. Any questions about the goods, please contact the corresponding salesman.

Datasheet:

<https://www.aosmd.com/res/datasheets/AOZ1280CI.pdf>

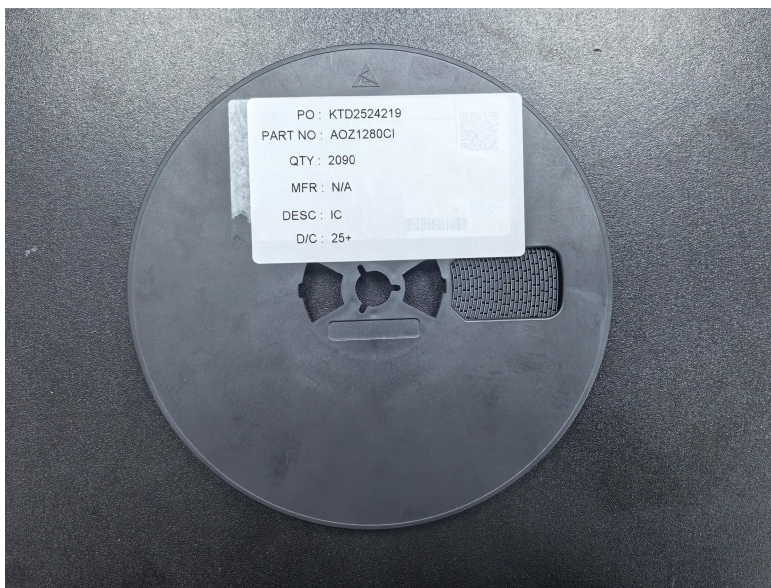


1.External Visual Inspection

1.1 Product Information

- **Packaging or label inspection of the samples are as follows:**

Labels are clear, no alterations, label information checks out; typed versions, typography, etc. conform to original factory characteristics.



Arrival picture

Fig1

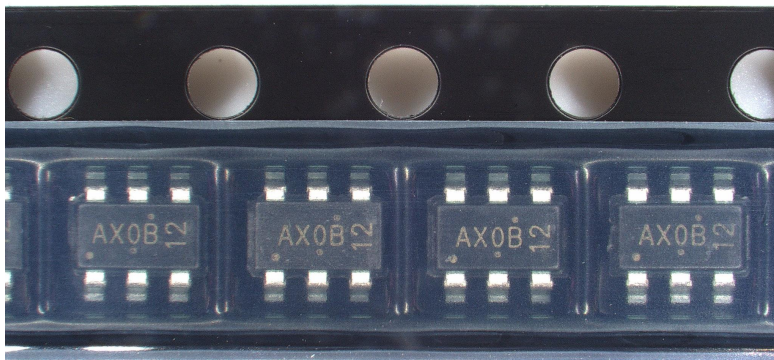


Arrival label

Fig2

The braided tape has no tears or burst tapes, meets the specifications of the specification, is a clear film with even indentations, and conforms to the original characteristics.

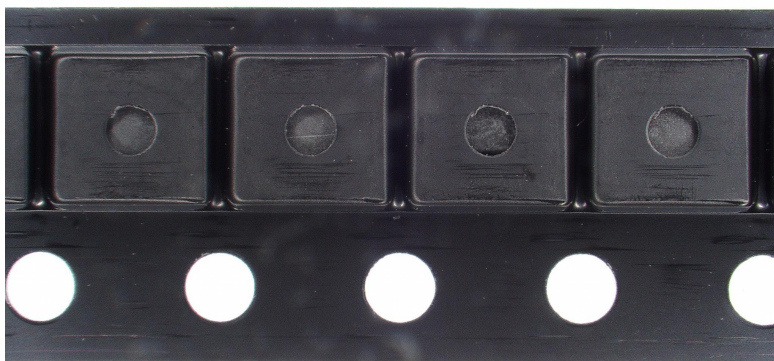
倍率: X20.0



Tape Front

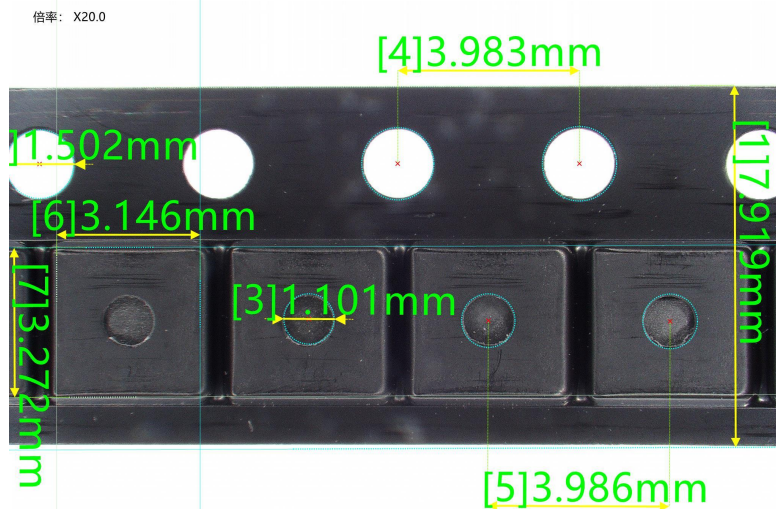
Fig3

倍率: X20.0



Tape Back

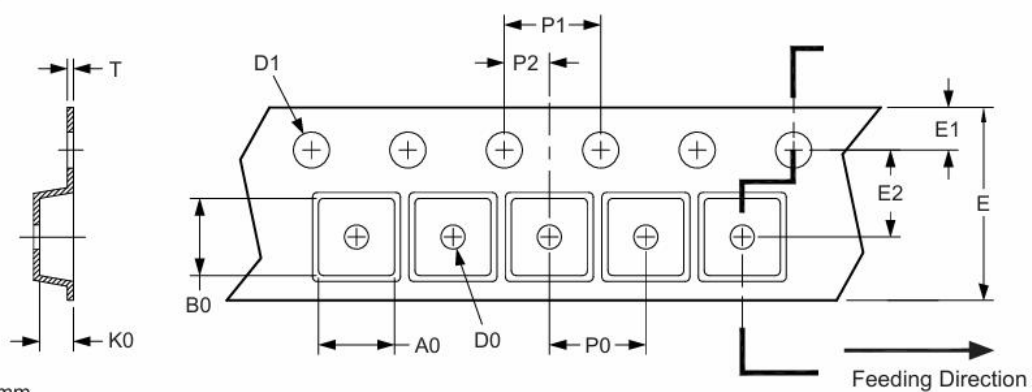
Fig4



Electronic measurements

Fig5

Tape



Unit: mm

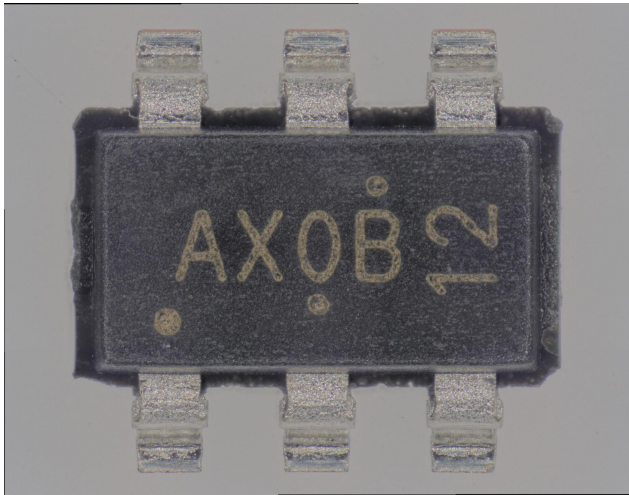
Package	A0	B0	K0	D0	D1	E	E1	E2	P0	P1	P2	T
SOT-23	3.15 ±0.10	3.27 ±0.10	1.34 ±0.10	1.10 ±0.01	1.50 ±0.10	8.00 ±0.20	1.75 ±0.10	3.50 ±0.05	4.00 ±0.10	4.00 ±0.10	2.00 ±0.10	0.25 ±0.05

Fig6

1.2 Surface Analysis

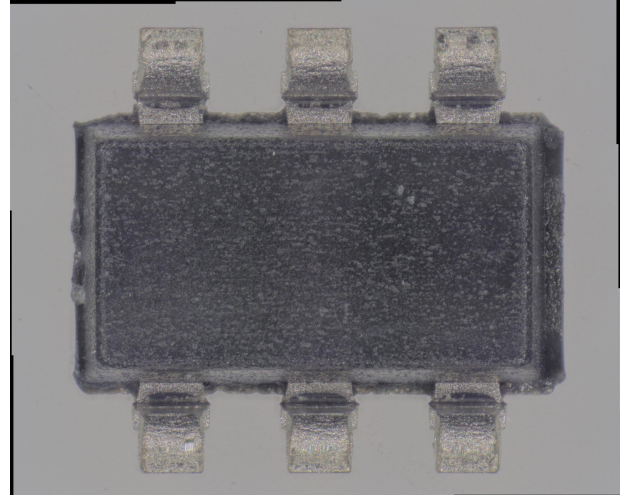
- The comparison specifications for the sampled samples show the following results:

Marking , typing version, typesetting and other comparison is consistent, chip packaging is not abnormal.



Top View

Fig7



Bottom View

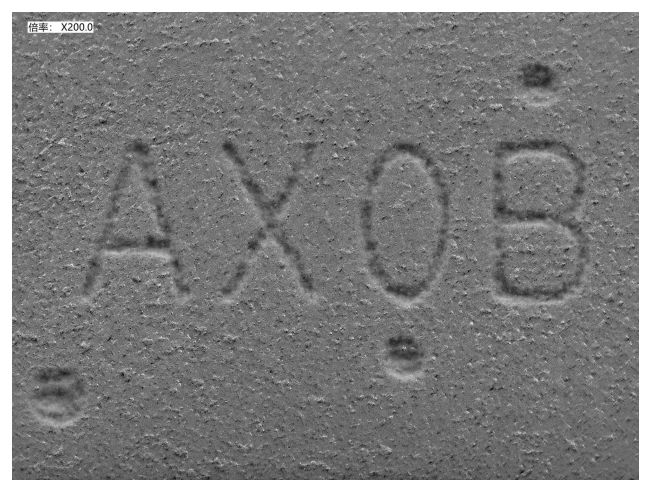
Fig8

The marking on the surface of the sample is clear, the granularity is obvious, the shape of the marking is regular, and there is no trace of secondary polishing;



Sample Marking

Fig9



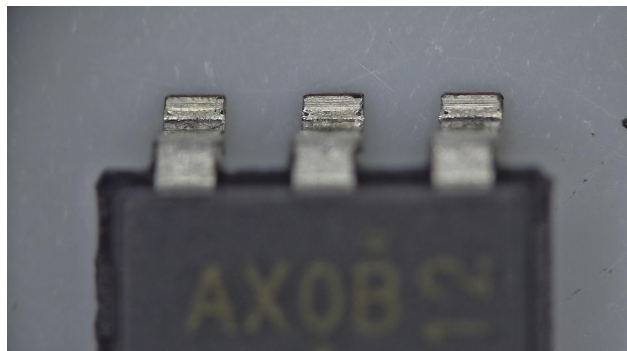
Opt-SEM

Fig10

1.3 Pin Plating Analysis

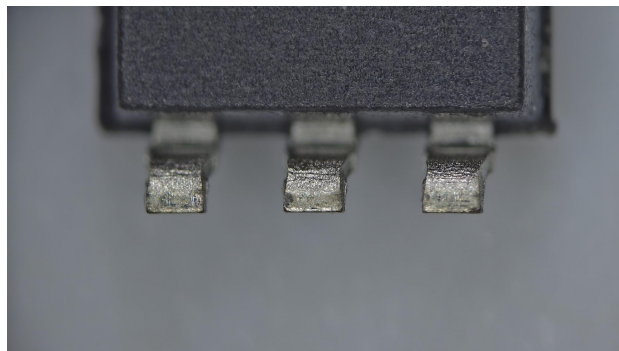
• **Analysis of the sampled samples for inspection of the pin coating showed the following results:**

The tin on the pin is uniform without abnormal, the cross-section of the exposed copper substrate is a normal phenomenon, there is no obvious sanding characteristics, the overall condition is good.



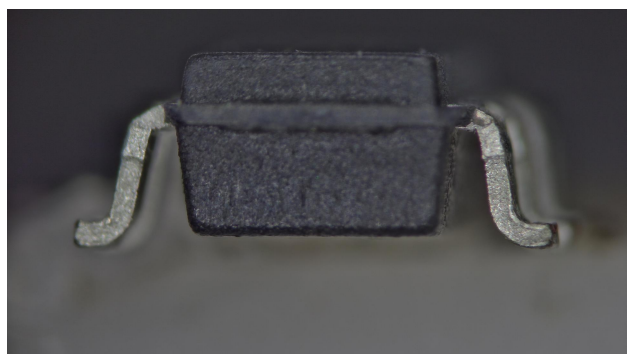
Top View of Pin

Fig11



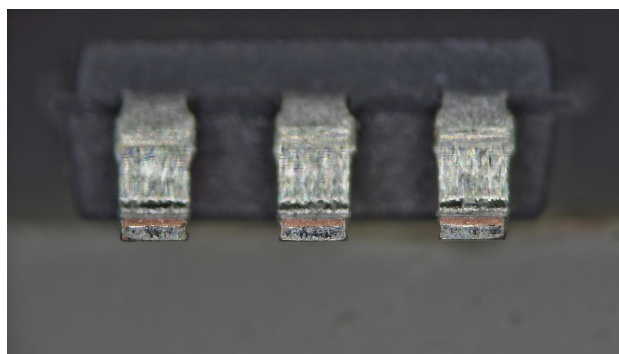
Bottom View of Pin

Fig12



Side View of Pin

Fig13

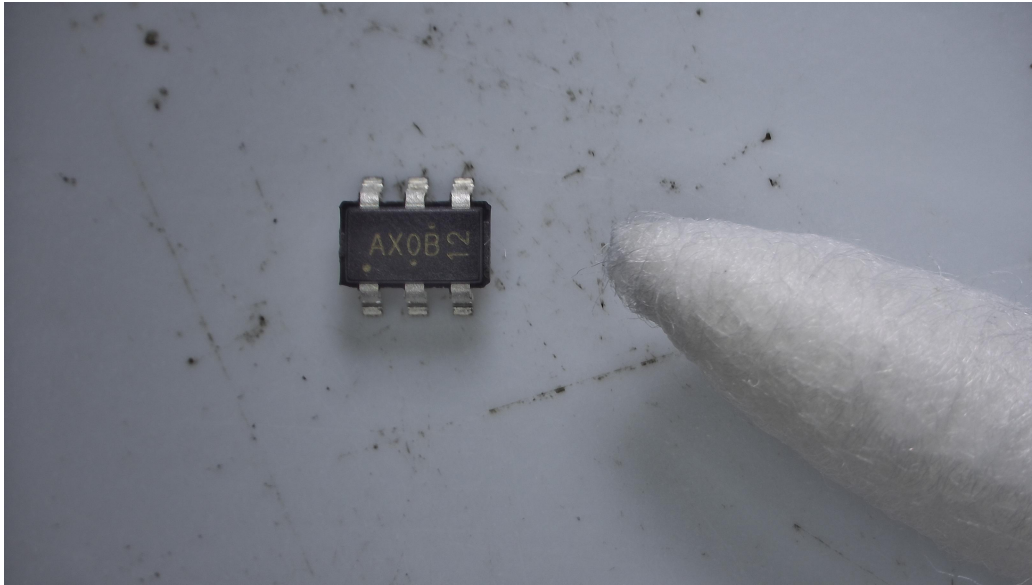


Pin cross-section

Fig14

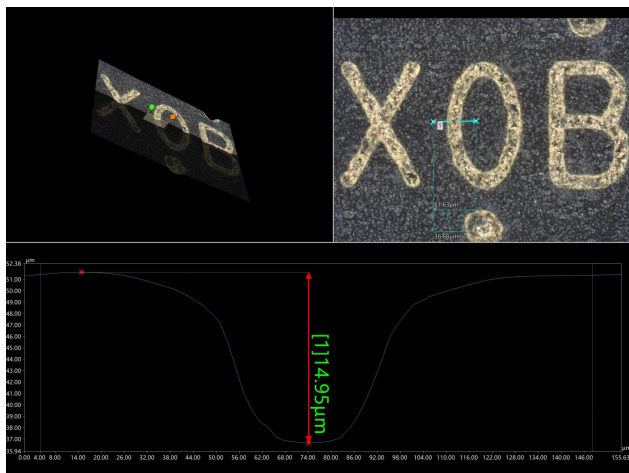
1.4 Aceton Inspection

After the surface and side of the sample were wiped back and forth with acetone for 3 times, the mark was still clearly visible, there was no obvious secondary coating, the depth of the mark did not change significantly under the EMS(Electron Microscope Scan),and the cotton swab was not blackened and other abnormal phenomena.



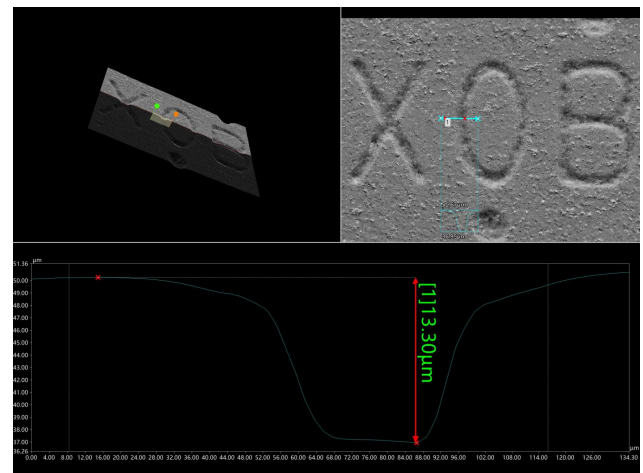
Acetone Test

Fig15



#1 Electronic measurements

Fig16



#2 Electronic measurements

Fig17

1.5 Dimension Measurement

- All size of the samples meet the requirement of the specifications.



Length: 2.87mm

Fig18



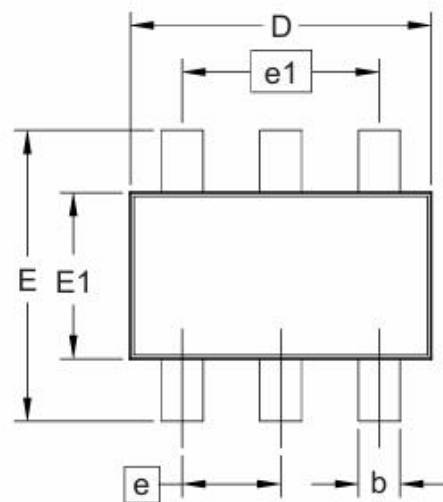
Width: 1.57mm

Fig19



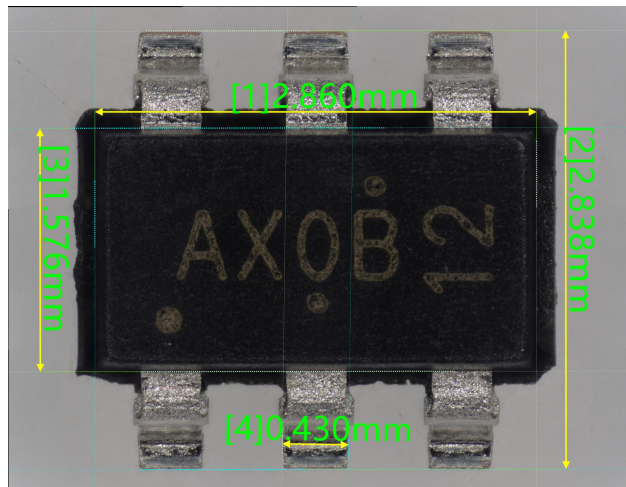
Thicknesses: 1.11mm

Fig20



Data Sheet

Fig21



#1 Electronic measurements

Fig22



#2 Electronic measurements

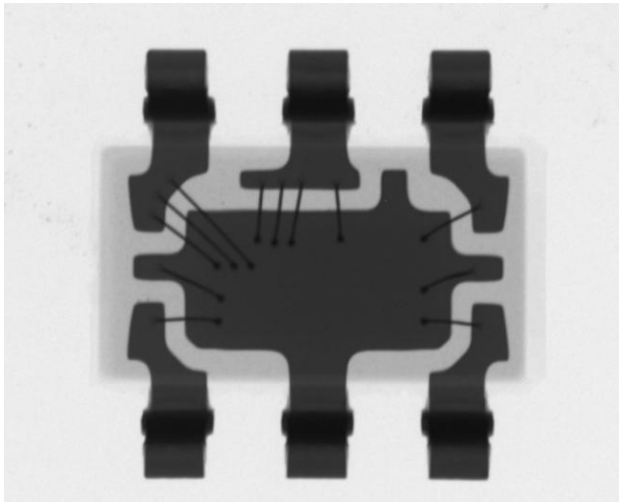
Fig23

Measurement data:

Sample number	Length/mm	Width/mm	Thicknesses/mm	Result
#1	2.87	1.57	1.11	PASS
#2	2.86	1.58	1.07	PASS
#3	2.86	1.57	1.10	PASS
#4	2.88	1.58	1.11	PASS
#5	2.89	1.59	1.11	PASS

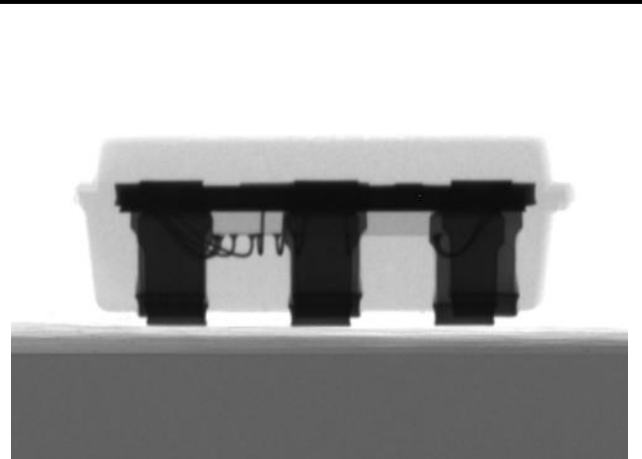
2.X-Ray Inspection

• X-RAY: The internal structure of the sample is intact, the interface at the output terminal well welded, there were no abnormalities such as broken wires or crossings in the inner coils.



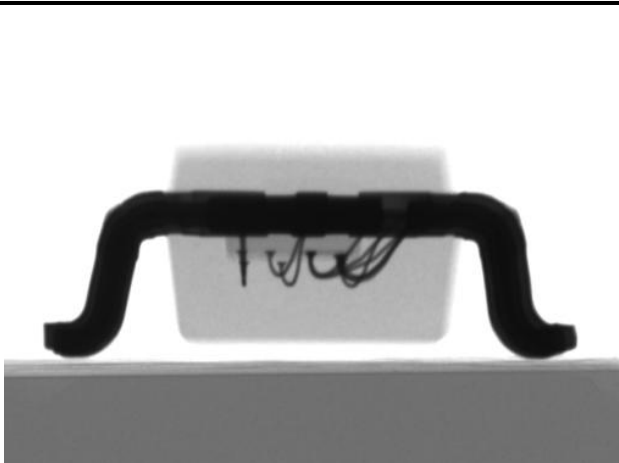
Top View

Fig24



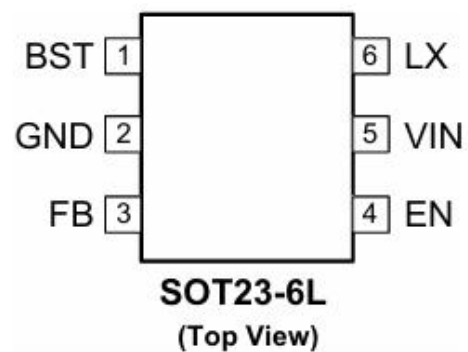
Side View

Fig25



Side View

Fig26



Pin Configuration

Fig27

3.List of Test Equipments

NO.	Inspection Item	Type of Equipment	Proofreading Period
1	Video microscope	SWG-N714	2025.04.09~2026.04.08
2	X-Ray	ZM-X5600	2025.04.09~2026.04.08
3	Digital Caliper	Mitutoyo 0-150mm	2025.01.08~2026.01.07
4	3D microscope	VHX-7000	2025.04.09~2026.04.08
5	Tin furnace	QUICK100-15S	2025.04.09~2026.04.08
6	Chemical unpacker	RKD motor-Lithium etching7000	2025.03.18~2026.03.17
Operation Environment		Temperature:15°C~35°C,humidity:30%~60%RH	