



Test Report

Sample Name: Discrete components

Sample Type: IRFS4010TRL PBF

Manufacturer: INFINEON

Customer:

Chuangxin Online Test Center Laboratory

February 21, 2024

Test Report

Customer:

Customer Address:

Sample Name: Discrete components

Sample Type: IRFS4010TRLPBF

Manufacturer: INFINEON

Date Code: 2236

Package Type: TO-263

Sample Amount: 2 PCS

Check Amount: 2 PCS

Arrived Date: 02/21/2024

Testing Date: 02/21/2024/10: 00 - 02/21/2024/14: 30



Tested by _____

Inspected by _____

Approved by _____

Test Item

External visual inspection

Pin correlation test

Programming test

Solderability analysis

Radiography(X-ray)

XRF test

Key functional test(KFT)

Baking

Tape and reel

Top permanency test

Internal visual inspection

SAT test

Cross section

CXO.lab

ANTE
创芯
检测

Methods & Equipment

1.1 Test standard:

- MIL-STD-883L 2019 2010.14

1.2 Optical microscope:

- Equipment spec:

Optical microscope: SEZ-260 X7-X45(Due date: 7/18/2024)

Metalloscope: FJ-5A X50-X1000 (Due date: 7/18/2024)

1.3 Laser lid opener:

- Equipment spec:

Laser lid opener: DM300-IC(Due date: 7/18/2024)

1.4 Product datasheet:

- 《INFINEON IRFS4010TRLPBF》:

https://www.infineon.com/dgdl/Infineon-IRFS4010-DataSheet-v01_01-EN.pdf?file

[Id=5546d462533600a401535636cbd72187](https://www.infineon.com/dgdl/Infineon-IRFS4010-DataSheet-v01_01-EN.pdf?fileId=5546d462533600a401535636cbd72187)

Analysis Summary

Internal visual inspection:

Applicable standard: **MIL-STD-883L 2019 2010.14**

Internal visual inspection was verified on 2 PCS samples(the DigiKey bag and the second bag were tested 1 PCS of D/C 2236 devices each: #1,#2). The 2 PCS samples have the same structure. No relevant manufacturer's mark was found on the die surface. The die size were 6.87 * 4.23 mm, samples do not exhibit cracks or damage on die surface.

CXO.lab



1. Device description:

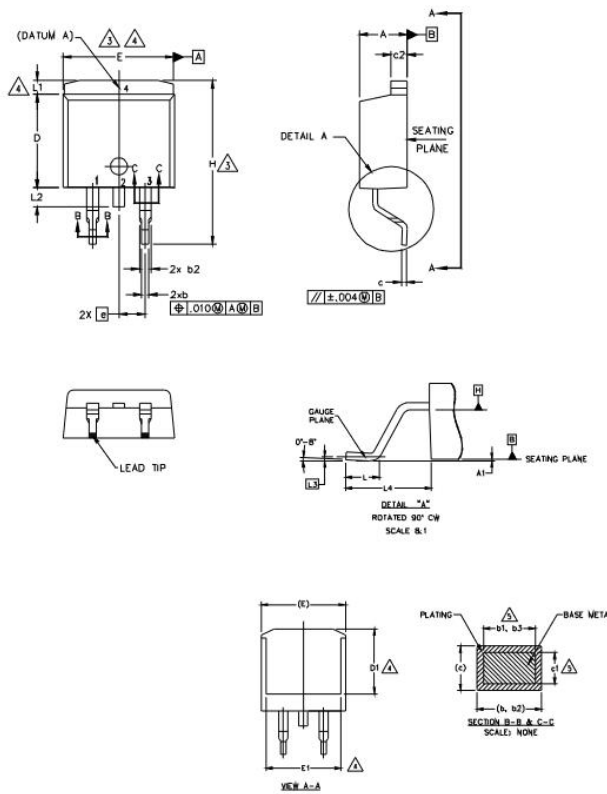
High Efficiency Synchronous Rectification in SMPS

Uninterruptible Power Supply

High Speed Power Switching

Hard Switched and High Frequency Circuits

2. Package dimension:



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994
 2. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
 3. DIMENSION D & E DO NOT INCLUDE MOLD FLASH. MOLD FLASH SHALL NOT EXCEED 0.127 [0.005"] PER SIDE. THESE DIMENSIONS ARE MEASURED AT THE OUTMOST EXTREMES OF THE PLASTIC BODY AT DATUM H.
 4. THERMAL PAD CONTOUR OPTIONAL WITHIN DIMENSION E, L1, D1 & E1.
 5. DIMENSION b1 AND c1 APPLY TO BASE METAL ONLY.
 6. DATUM A & B TO BE DETERMINED AT DATUM PLANE H.
 7. CONTROLLING DIMENSION: INCH.
 8. OUTLINE CONFORMS TO JEDEC OUTLINE TO-263AB.

SYMBOL	DIMENSIONS				NOTES
	MILLIMETERS		INCHES		
	MIN.	MAX.	MIN.	MAX.	
A	4.06	4.83	.160	.190	5
A1	0.00	0.254	.000	.010	
b	0.51	0.99	.020	.039	
b1	0.51	0.89	.020	.035	
b2	1.14	1.78	.045	.070	
b3	1.14	1.73	.045	.068	5
c	0.38	0.74	.015	.029	5
c1	0.38	0.58	.015	.023	
c2	1.14	1.65	.045	.065	
D	8.38	9.65	.330	.380	3
D1	6.86	-	.270	-	4
E	9.65	10.67	.380	.420	3,4
E1	6.22	-	.245	-	4
e	2.54	BSC	.100	BSC	4
H	14.61	15.88	.575	.625	
L	1.78	2.79	.070	.110	
L1	-	1.65	-	.066	
L2	1.27	1.78	-	.070	
L3	0.25	BSC	.010	BSC	
L4	4.78	5.28	.188	.208	

LEAD ASSIGNMENTS

- HEXFET**
- 1.- GATE
 - 2, 4.- DRAIN
 - 3.- SOURCE

- IGBTs, CoPACK**
- 1.- GATE
 - 2, 4.- COLLECTOR
 - 3.- EMITTER

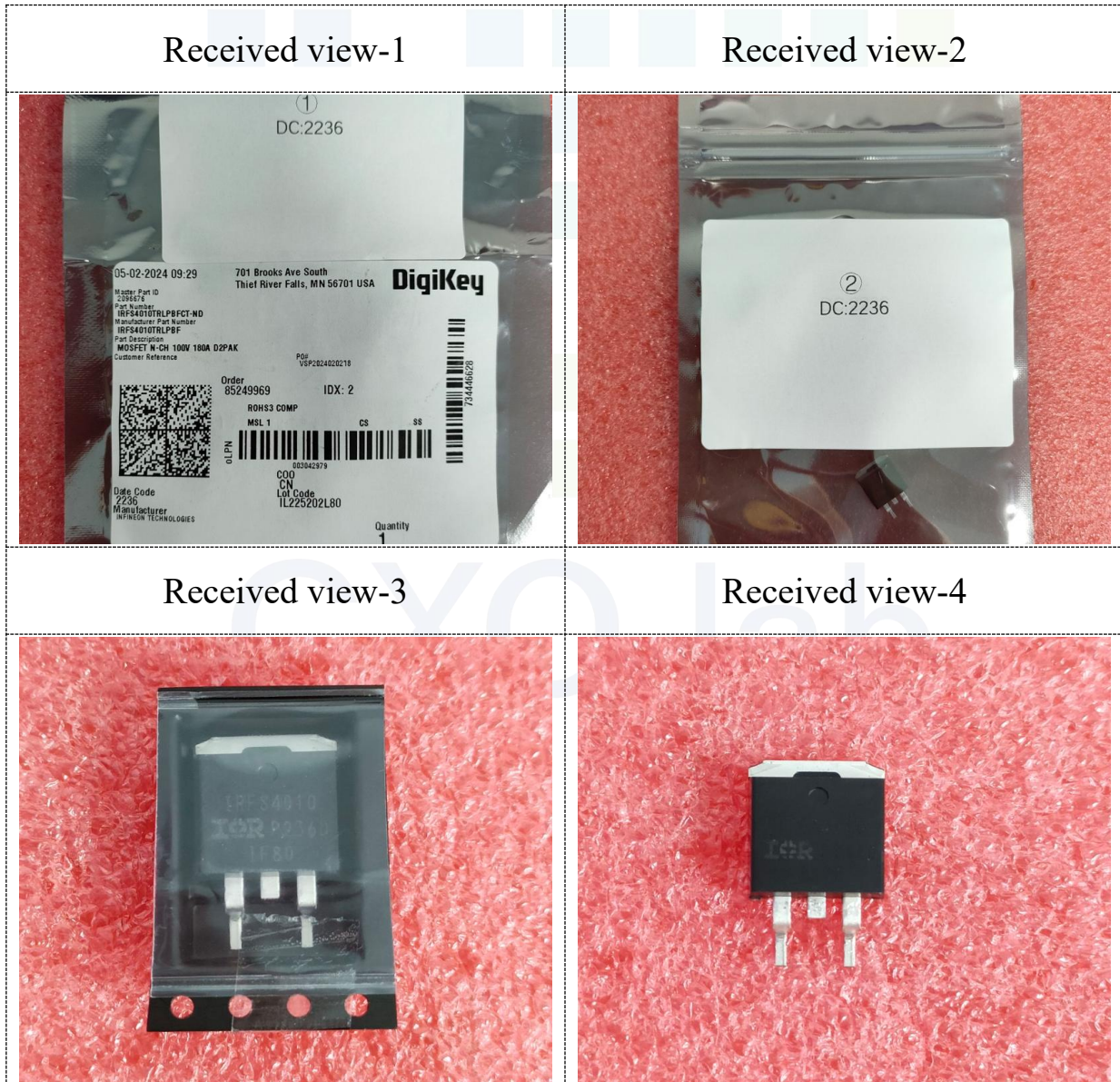
- DIODES**
- 1.- ANODE *
 - 2, 4.- CATHODE
 - 3.- ANODE

* PART DEPENDENT.

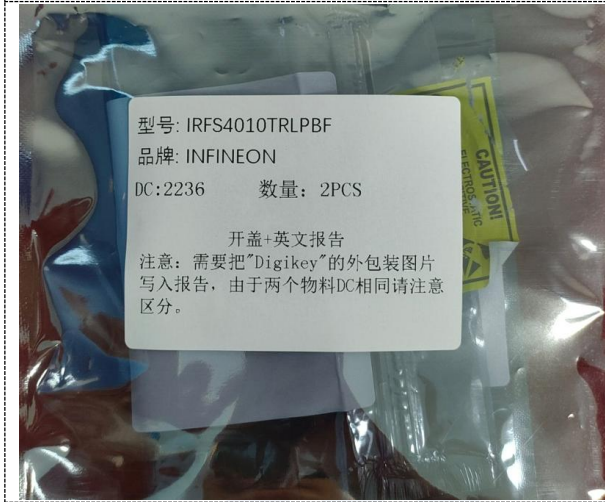
3. Receiving inspection:

Gross Weight	17 g	Parts Total	2 PCS
Number of Boxes	N/A	Full Label	Exist
Package Type	Bulk & Reel	Moisture Protection	N/A
MSL	N/A	ESD Protection	Exist

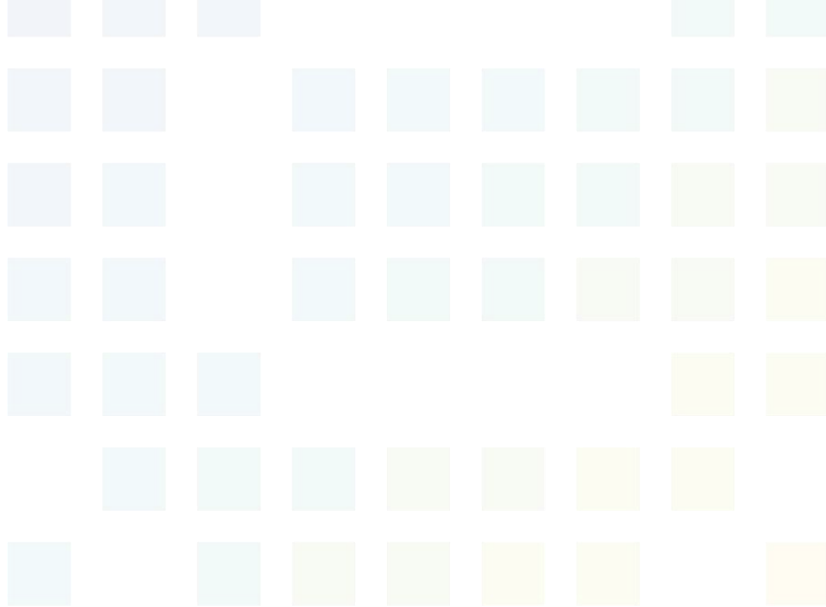
Note: All devices contain 2 PCS samples.



Received view-5



Received view-6



CXO.lab

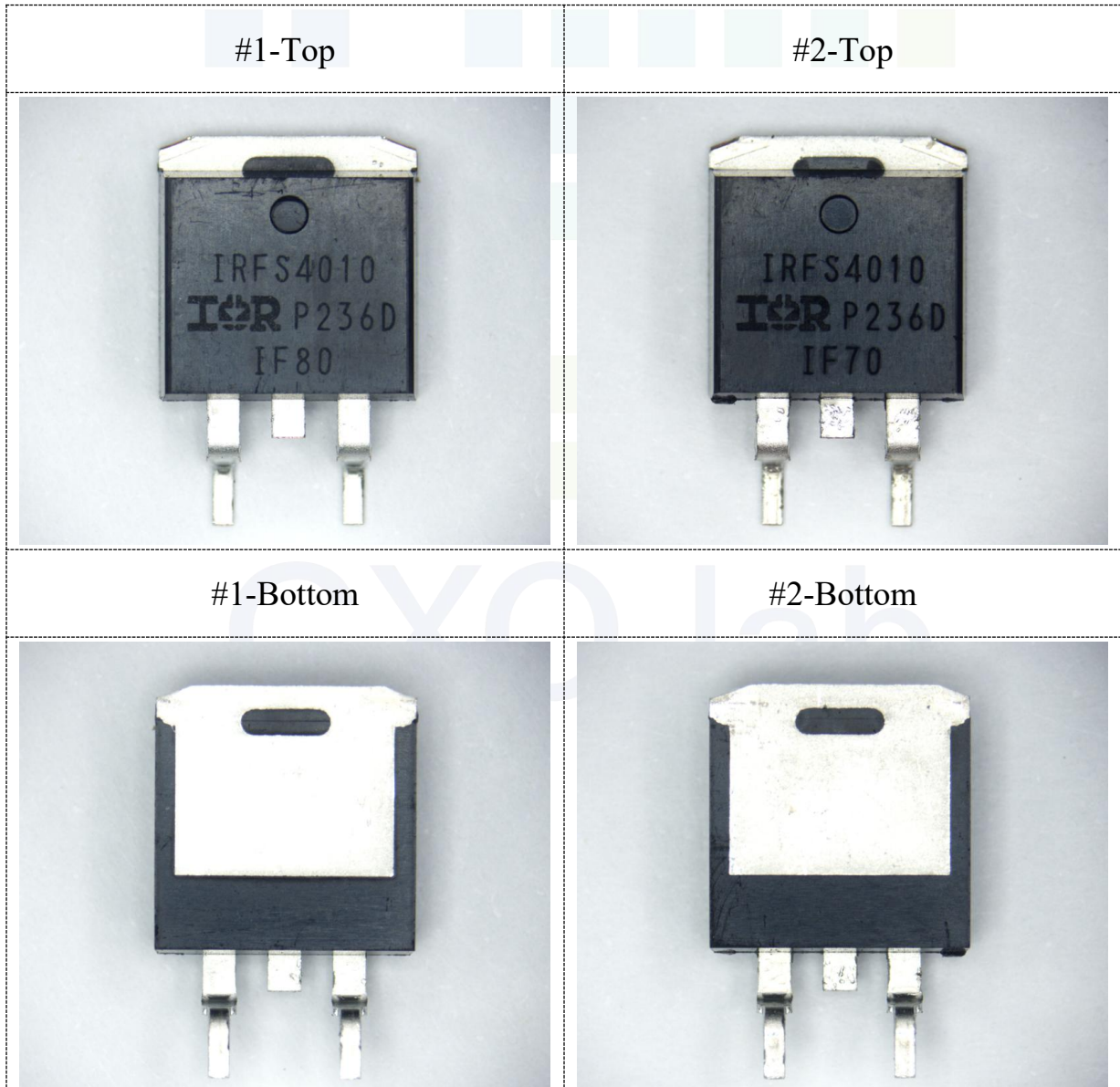


4. Internal visual inspection:

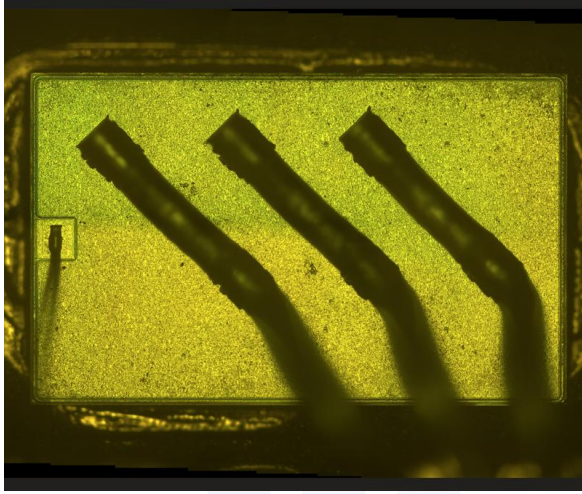
Applicable Standard: **MIL-STD-883L 2019 2010.14**

Ambient Temperature: 25.1 °C Relative Humidity: 58.2 % RH

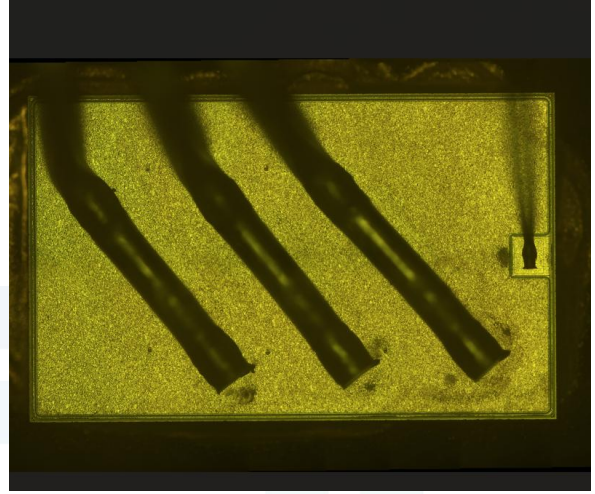
Internal visual inspection was verified on 2 PCS samples(the DigiKey bag and the second bag were tested 1 PCS of D/C 2236 devices each: #1,#2). The 2 PCS samples have the same structure. No relevant manufacturer's mark was found on the die surface. The die size were 6.87 * 4.23 mm, samples do not exhibit cracks or damage on die surface.



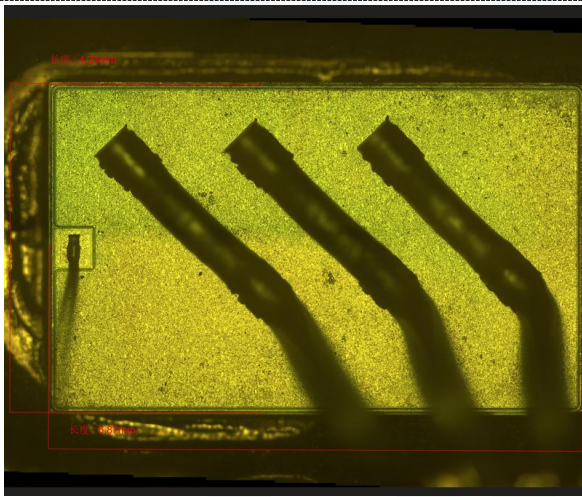
#1-Die topography



#2-Die topography



#1-Die size



#2-Die size



-End of Report-

CXO.lab

Disclaimer

1. The test report is invalid without the stamp of “company seal” and “cross-page seal”.
2. The copy of the test report is invalid without the stamp of “company seal” and “cross-page seal”.
3. The test report is invalid without the signatures of operator, supervisor and manager.
4. A modified or partial copy of the test report is invalid.
5. When there is disagreement with the test report, please submit the issue to us within 15 days from the date of receipt. Overdue information will not be accepted.
6. The test report is only reflective of the test results of testing samples, not of the quality of batch products.
7. The * indicates subcontract test data.



CXOLab WeChat official account

Tel: 0755-82719442 **Email:** engineer@iclabcn.com

Website: <https://www.iclabcn.com>

Add: F/r 2nd, Building A, Yingdafeng Industrial Park, No.393, Jihua Rd.,
Longgang Dist., Shenzhen, China