PCN

AO-PCN-2026-061-A

Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

15.10.2026

Dear Customer,

please review this **PCN** and provide your feedback in the **Customer approval form** (at the end of this PCN document) to your ams OSRAM sales partner before **25.11.2026** *)

Your prompt reply will help ams OSRAM to assure a smooth and well executed transition. If ams OSRAM does not hear from your side by the due date, we will assume your (if you are a Distributor: and your customer's) full acceptance to this proposed change and its implementation.

ams OSRAM understands the time requirements your organization needs to approve this PCN.
However, if you can provide ams OSRAM an estimated date your organization will have finalized this PCN review, ams OSRAM can use this date to plan continued production to secure your order needs during the transition time.

Your attention and response to this matter is highly appreciated.

Please direct your inquiries to your local Sales office.

*) ams OSRAM aligns with the widely recognized JEDEC/ECIA/IPC Joint Standard No. 46, which stipulates:

- Customers should acknowledge receipt of the PCN within 30 days of delivery of the PCN.
- Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.
- After acknowledgement, lack of additional response within the 90 day period constitutes acceptance of the change. If the customer requires additional time to perform sample testing, beyond the 90 day review period, an extension must be negotiated with the supplier.

Subject of change:	Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™	
Affected products:	SFH 7018A; SFH 7018B	
Reason for change:	• Introduction of the latest 6-inch chip technology to ensure long-term product availability and secure supply continuity. • The datasheet has been updated to reflect the characteristics of the new chip technology.	
Description of change:	Current status	New status
	For details refer to document 2_cip_AO-PCN-2026-061-A	
Product identification:	Date code	
Time schedule for PCN material: (after implementation of change):	Final qualification report:	15.10.2026
	Samples available:	Upon request
	Intended Start of delivery:	01.02.2027 *) *) or earlier if released by customer and upon mutual agreement
Time schedule for Pre-PCN material: (prior to implementation of change):	Last time order date (LTO):	30.04.2027 **) **) Lead time and LTO quantity shall be mutually agreed between ams OSRAM and customer.
	Last time delivery date (LTD):	30.06.2027 ***) ***) planned last date for delivery of products of current status
Assessment:	No change in product reliability. No change in package form, fit, or function.	
Documentation:	Customer information package: 2_cip_AO-PCN-2026-061-A 3_Qual_ AO-PCN-2026-061-A	

Note:
Pre-PCN material: Products of current status, means before implementation of the changes as described in the PCN.
PCN material: Products with implementation of the changes as described in the PCN.

Customer approval form
AO-PCN-2026-061-A

Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Please list product(s) affected in your application(s):

Please check the appropriate box below:

○ **Approval:** We agree with the proposed change and accept start of the shipment upon availability of PCN material	○ **Not relevant:** Change is not relevant for products in use.

○ **Change cannot be accepted:**

- ○ **We have objections:**
- ○ **We request following Information:**
- ○ **We request following Samples:**
- ○ **Expected approval date:**
- ○ **Volume requirements for Pre-PCN material:**

○ **Remarks:**

Sender:

Company:

Address / Location:

Signature: **Date:**

Please return this approval form to your Sales partner.

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Sense the power of light

PCN
AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Customer information package

OS Q CQM ICI
2026-10-15

Agenda

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AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Reason for change:

Item	Description
1.	Introduction of the latest 6-inch chip technology to ensure long-term product availability and secure supply continuity.
2.	The datasheet has been updated to reflect the characteristics of the new chip technology.

Assessment:

No change in product reliability.
No change in package form, fit, or function.

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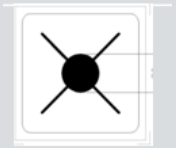
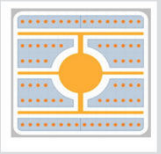
AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Description of change: Infrared chip

Item	Current status	New status
Picture (schematic)		
Carrier/ Substrate	Germanium	Silicon
Die thickness (typ in µm)	150	120

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AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Changes in the datasheets:

Page	Change Item	Reason	Old	New
1	Rth_JA_max For infrared (940 nm)	Improved thermal performance due to new silicon substrate technology	Typ: 50 K / W Max: 62 K / W	Typ: 26 K / W Max: 36 K / W

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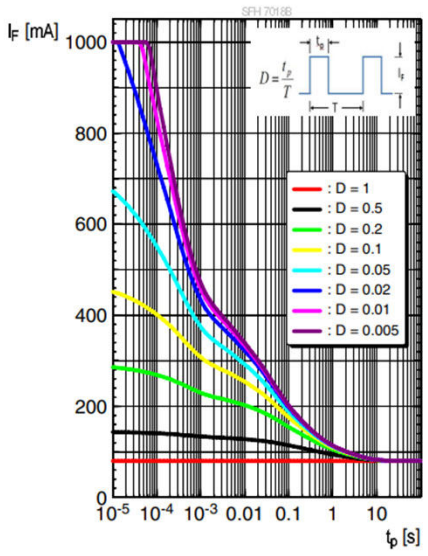
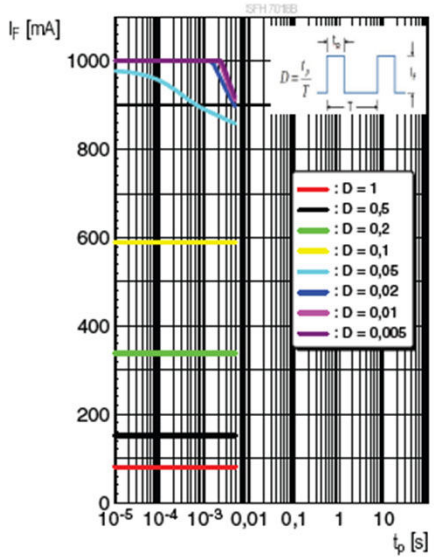
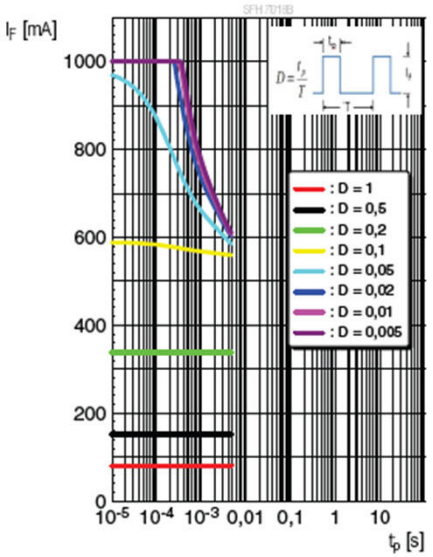
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Changes in the datasheets: Permissible Pulse Handling Capability

Old	New	
Permissible Pulse Handling Capability • infrared (940 nm): $I_F = f(t_p)$; D = parameter; = 85 °C	**Permissible Pulse Handling Capability** • infrared (940 nm): $I_F = f(t_p)$; D = parameter; = 25 °C	**Permissible Pulse Handling Capability** • infrared (940 nm): $I_F = f(t_p)$; D = parameter; = 85 °C







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AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

List of affected products

Brand	
MULTILED™	SFH 7018A SFH 7018B

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AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

PCN Samples

Brand	
MULTILED™	SFH 7018A SFH 7018B

Color code: available upon request

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AO-PCN-2026-061-A
Introduction of 6” AlGaAs Thinfilm Chip for MULTILED™

Time schedule

for PCN material (after implementation of change):		
Final qualification report	15.10.2026	
Samples	Available upon request	
Intended Start of delivery	01.02.2027*)	*) or earlier if released by customer and upon mutual agreement

for Pre-PCN material (prior to implementation of change):		
Last time order date (LTO)	30.04.2027 **)	**) Lead time and LTO quantity shall be mutually agreed between ams OSRAM and customer.
Last time delivery date (LTD)	30.06.2027 ***)	***) planned last date for delivery of products of current status

Note:
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ams
OSRAM

Qualification Report 260198C1

Subject	Introduction of 6'' AlGaAs Thinfilm Chip for MULTILED according to AO-PCN-2026-061-A
Date	15.10.2026
Tested device	SFH 7018A
Brand (including sub brands)	MULTILED
Applies to	SFH 7018A; SFH 7018B

ams-OSRAM AG
Tobelbader Strasse 30
8141 Premstaetten, Austria
Phone +43 3136 500-0
ams-osram.com

Pre-conditioning according to Jedec Level 3

Test Performed	Condition	Duration	Sample Size	Failures El.	Failures Opt.	Failures Vis
Wet High Temperature Operating Life WHTOL *JESD22-A101*	T_A = 60°C; r.H.= 90% I_F = 1mA *(IR chip biased)*	1000h	4x26	0	0	0
Temperature Cycling TC *JESD22-A104*	T_A = -40°C/+85°C 15min each extreme	300C	4x26	0	0	0
High Temperature Operating Life HTOL *JESD22-A108*	T_A = 85°C I_F = 80mA *(IR chip biased)* (T_j = 125°C; T_s = 101°C)	500h	4x26	0	0	0
Pulsed Operating Life PLT *JESD22-A108*	T_A = 25°C I_F = 732mA; tp = 0,1ms; D = 3% *(IR chip biased)*	500h	4x26	0	0	0
Electrostatic Discharge HBM *ANSI/ESDA/ JEDEC JS-001*	Human Body Model	2000V	4x26	0	0	0

Note:
Lot A-C: Evaluation Lot
Lot D: Control Lot

Acceptance limit:

Electrical failures: Vf (If =20mA) > 1,5V; > ± 10% from initial value

Optical failures: Ie (If =20mA) > ± 50% from initial value

Visual failures: acc JEDEC JESD22-B101

Conclusion: The tested devices representing the product family as stated in the applies to section fulfill the reliability requirements.

Disclaimer

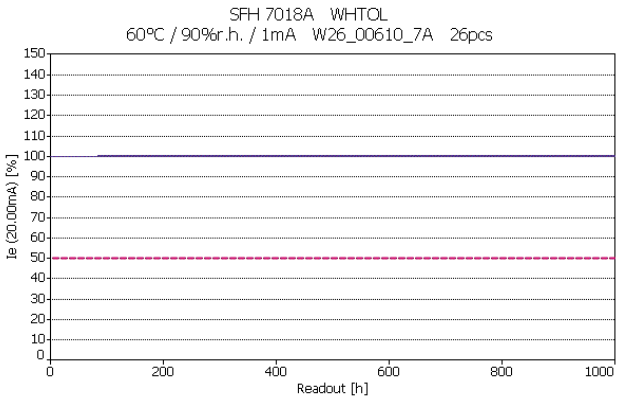
PLEASE CAREFULLY READ THE BELOW TERMS AND CONDITIONS BEFORE USING THE INFORMATION.
IF YOU DO NOT AGREE WITH ANY OF THESE TERMS AND CONDITIONS, DO NOT USE THE INFORMATION.

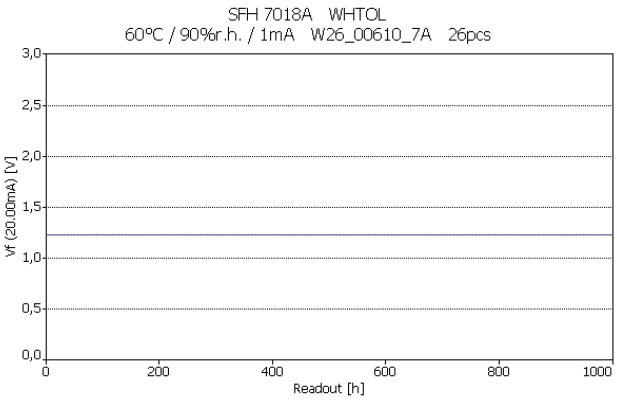
The Information contained in this Document does not constitute an independent warranty. The committed behavior is described in the Product data sheet and/or further, mutually agreed specifications.
Distribution of part or all of the contents of this Document to any 3rd party in any form without the prior permission of ams-OSRAM International GmbH is prohibited except in accordance with applicable mandatory law.

Further explanations:
Data: The Data used in this Document consider the reliability test results under the mentioned driving conditions only. For Product information on the maximum operating conditions and the OSRAM standard qualification profile please refer to the Product data sheet or contact your local sales partner.
Conditions: The conditions for the generation of the Data are as follows:
1. The Data and curves shown in this Document are based on experiments carried out under laboratory conditions on a random sample size of LED/IRED/Laser/Detector with readouts at discrete readout times (where applicable). Thus, the Data above represent a limited number of production lots only and may differ between different assembly lots over time (including chip or package changes). Thus, the behavior of the LED/IRED/Laser/Detector in the final application may differ from the Data. The behavior of the LED/IRED/Laser/Detector at conditions or readout times deviating from those stated above may not be deduced from the Data.
2. If applicable:
    a) Extended driving conditions:
    The tested driving conditions exceed the maximum limits stated in the Product data sheet. Therefore, a reduced lifetime or an accelerated degradation is expected. Failure limits noted in the Document refer to the testing condition according to the OSRAM standard Product qualification profile and not to the actual testing condition.
    b) Extended testing duration:
    The testing duration exceed the OSRAM standard qualification profile of the mentioned Product. Failure limits noted in the Document refer to the testing duration according to the OSRAM standard Product qualification profile and not to the actual testing duration.
    c) Exceeding standard qualification conditions – (Product data sheet limits not affected):
    The tested driving conditions exceed the OSRAM standard qualification profile of the mentioned Product. Therefore a reduced lifetime or an accelerated degradation is expected. Failure limits noted in the Document refer to the testing condition according to the OSRAM standard Product qualification profile and not to the actual testing condition.
3. For long term operation additional failure modes of the chip or package can occur which are not shown in this Document.
4. Possible differences in the thermal management of OSRAM and customer's setup may lead to a different aging behavior.

WHTOL 60°C/90%r.H; 1mA

Lot A





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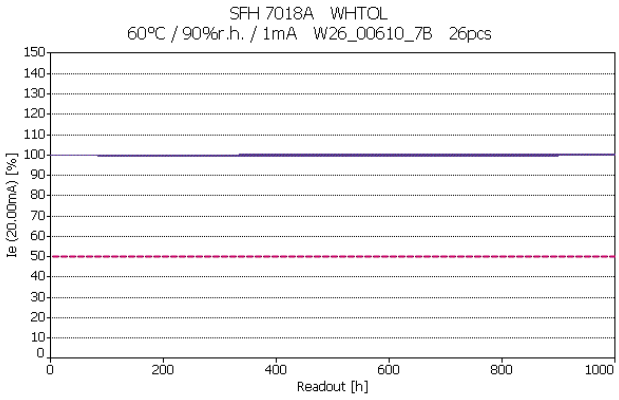

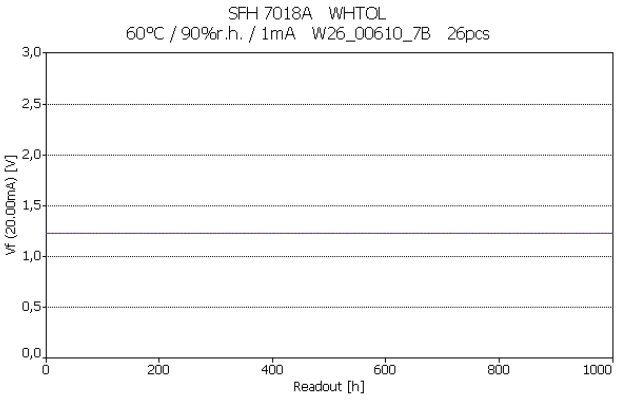

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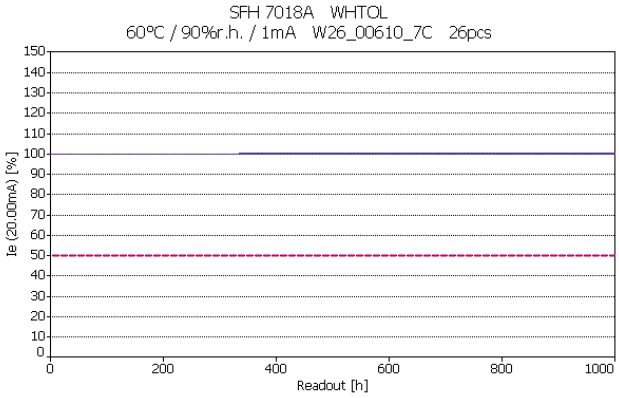
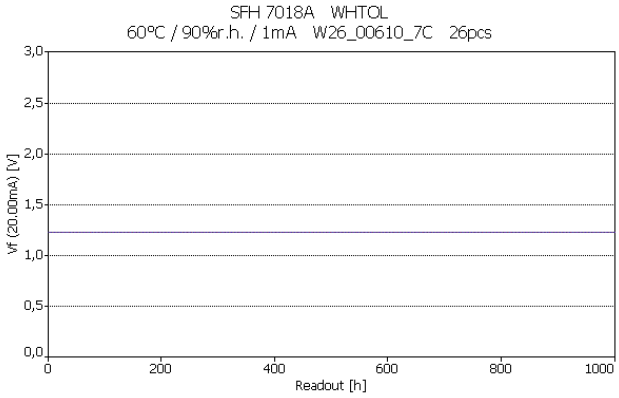
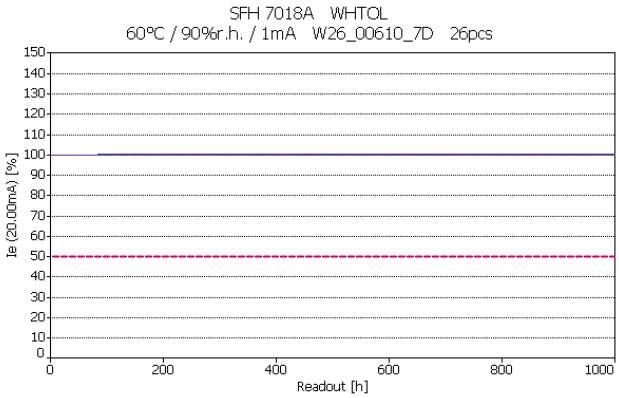

SFH 7018A WHTOL
60°C / 90%r.h. / 1mA W26_00610_7C 26pcs
Ie (20.00mA) [%]
Readout [h]


SFH 7018A WHTOL
60°C / 90%r.h. / 1mA W26_00610_7C 26pcs
Vf (20.00mA) [V]
Readout [h]

Lot D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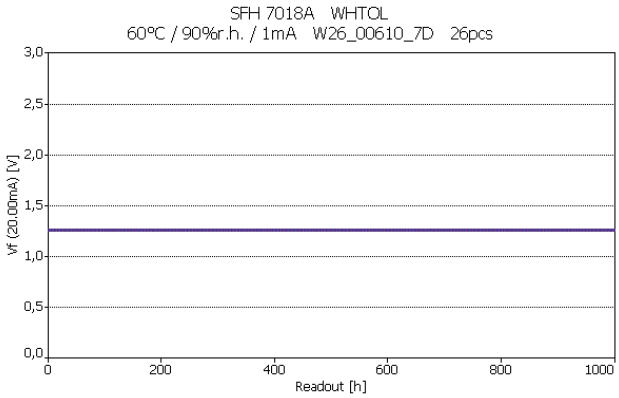
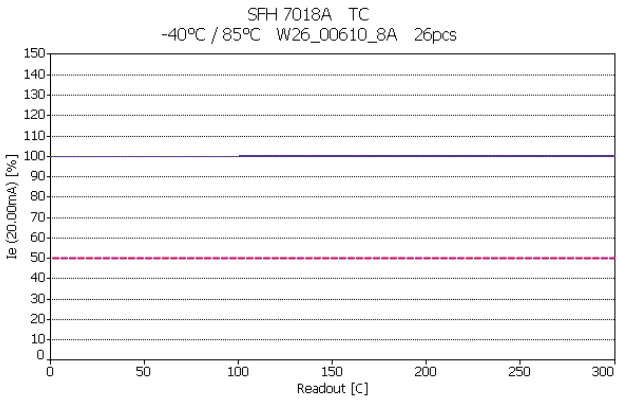
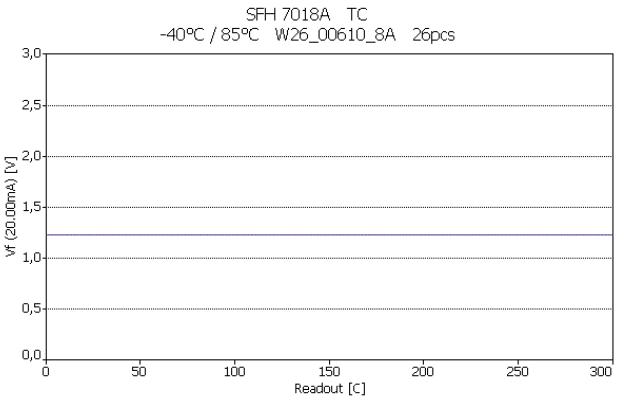

SFH 7018A WHTOL
60°C / 90%r.h. / 1mA W26_00610_7D 26pcs
Vf (20.00mA) [V]
Readout [h]

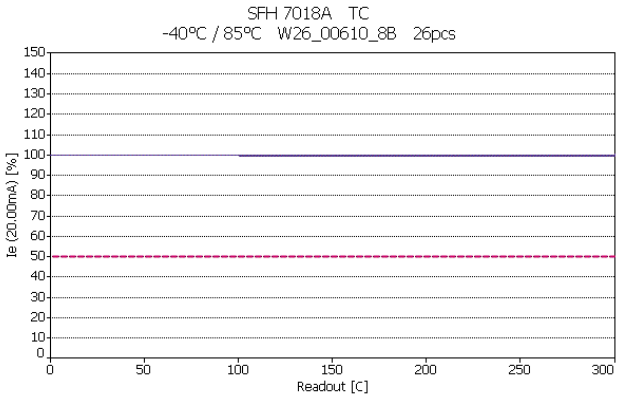
TC -40°C/85°C

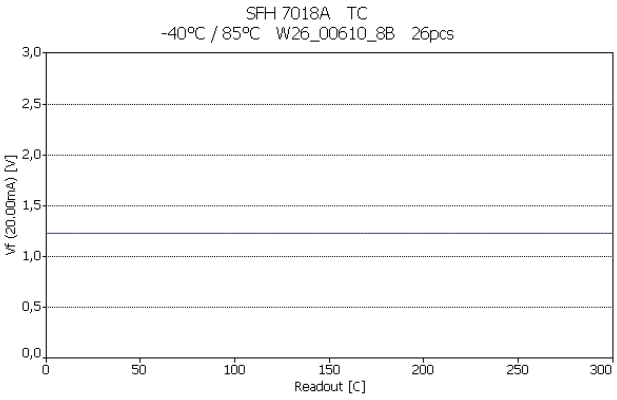
Lot A





Lot B





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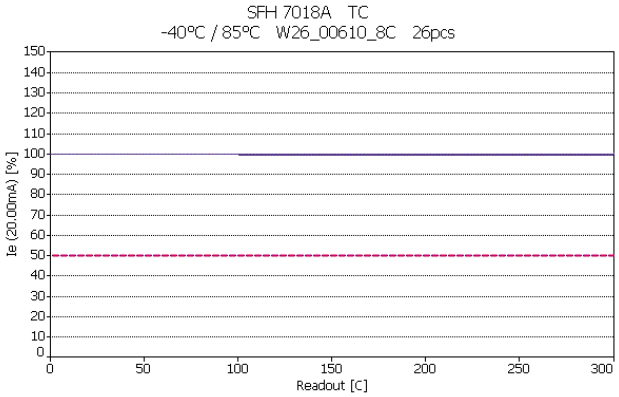
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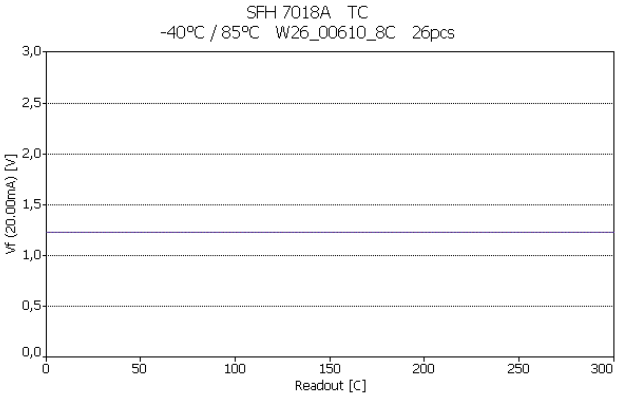
Ie (20.00mA) [%]
Readout [C]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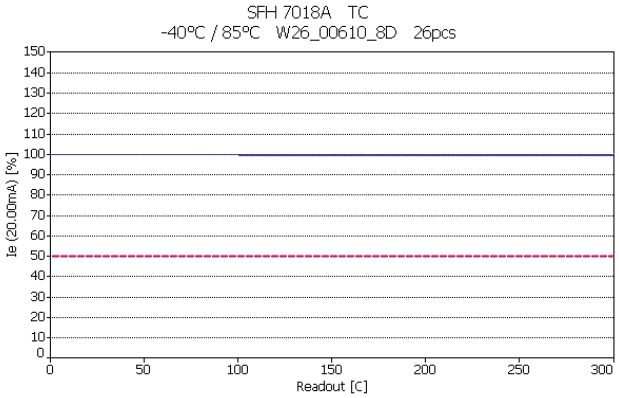
Vf (20.00mA) [V]
Readout [C]

Lot D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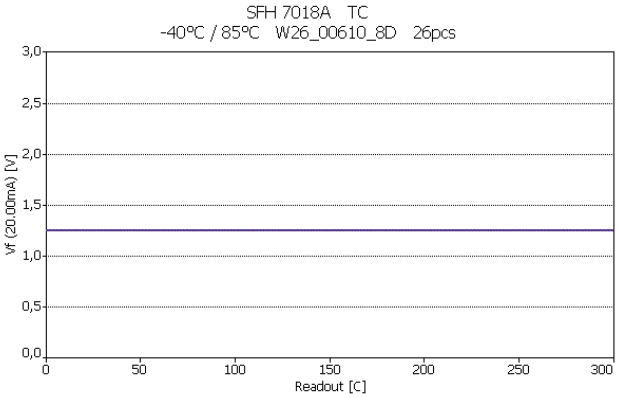
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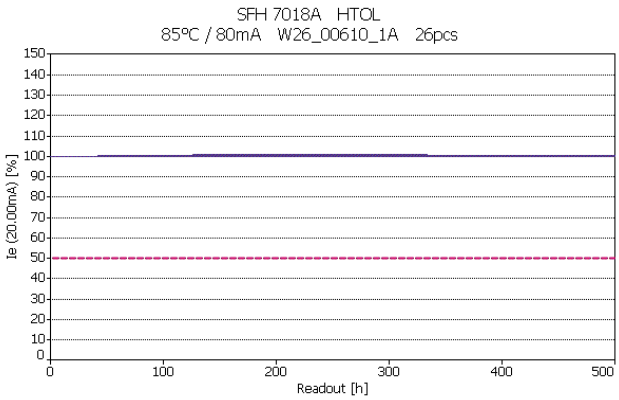
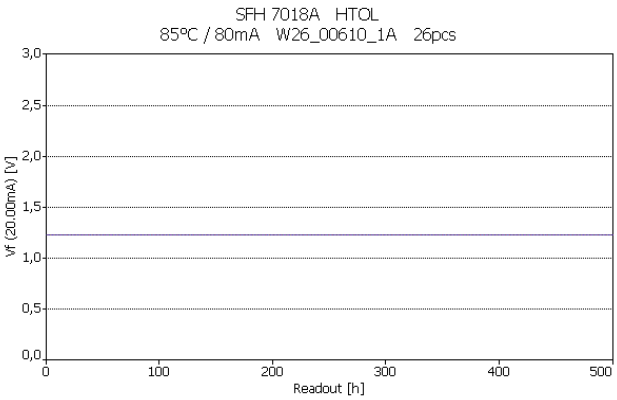
HTOL 85°C; 80mA

Lot A





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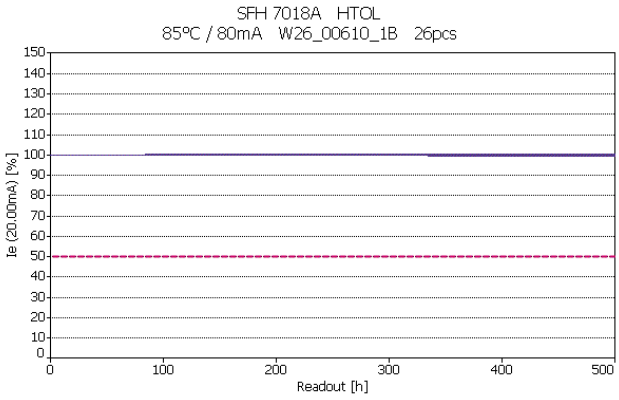

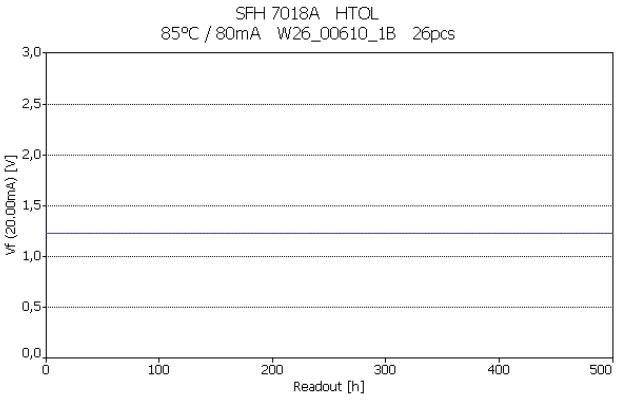

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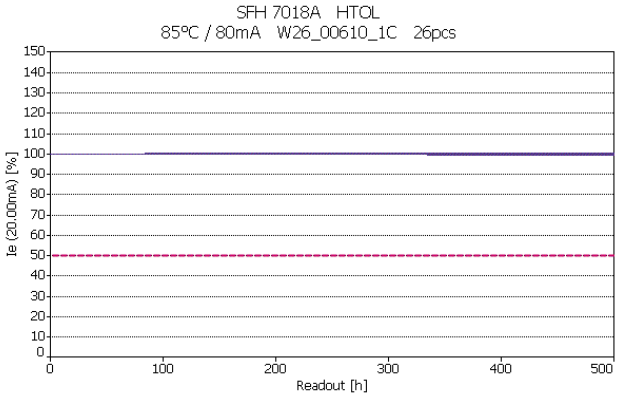
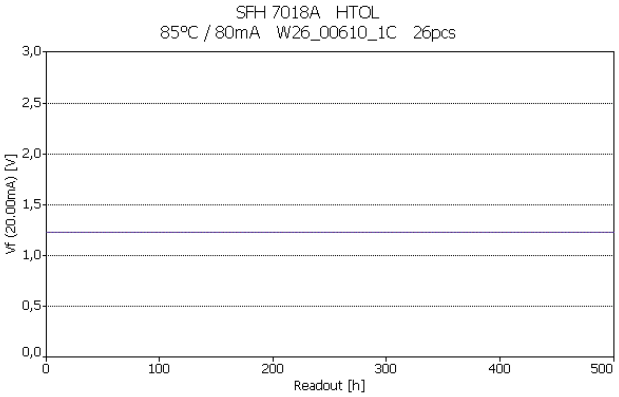

SFH 7018A HTOL
85°C / 80mA W26_00610_1C 26pcs
Ie (20.00mA) [%]
Readout [h]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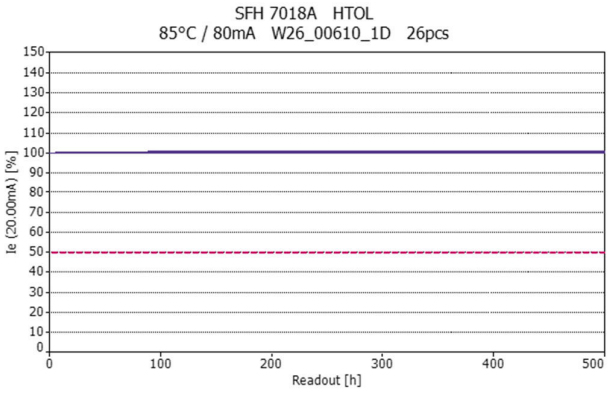
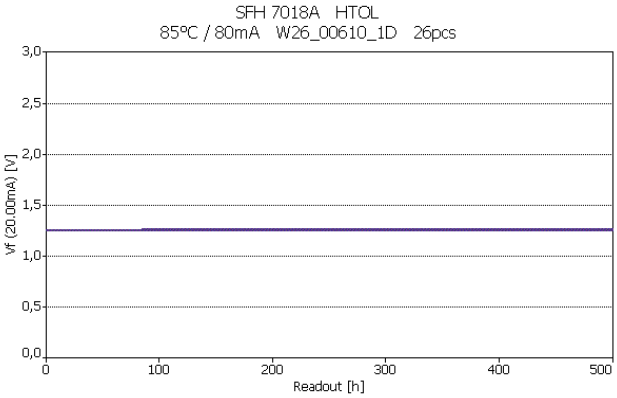
85°C / 80mA W26_00610_1C 26pcs
Vf (20.00mA) [V]
Readout [h]

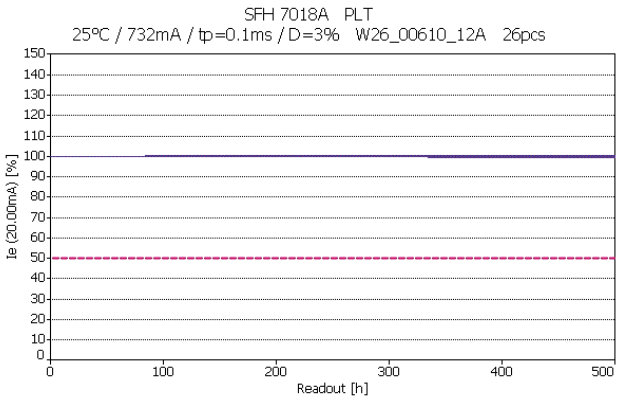
Lot D

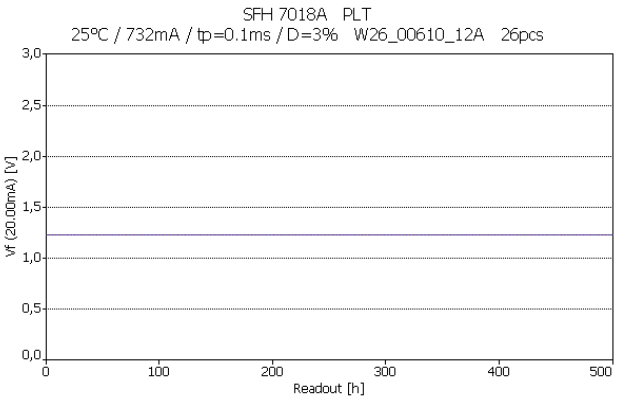

SFH 7018A HTOL
85°C / 80mA W26_00610_1D 26pcs
Ie (20.00mA) [%]
Readout [h]


SFH 7018A HTOL
85°C / 80mA W26_00610_1D 26pcs
Vf (20.00mA) [V]
Readout [h]

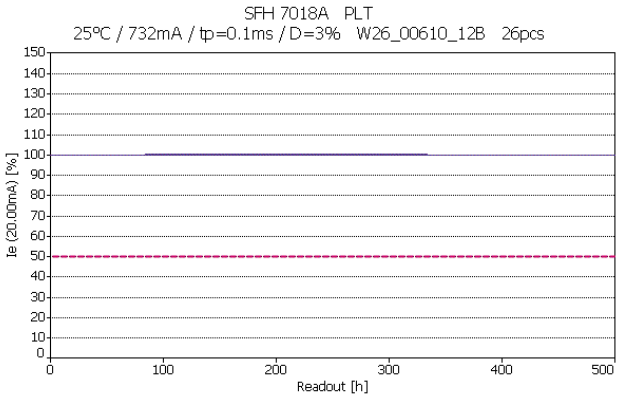
PLT 25°C; 732mA; tp=0.1ms; D=3%

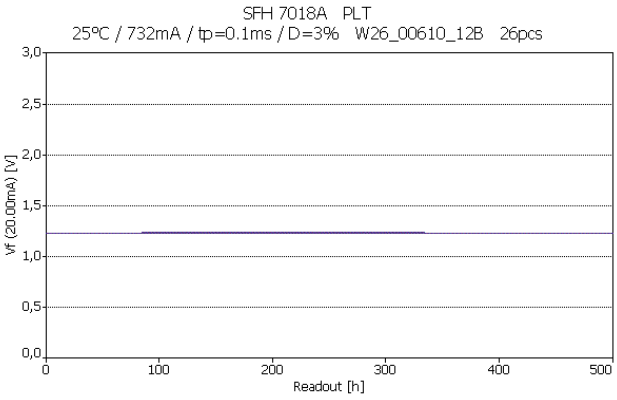
Lot A





Lot B





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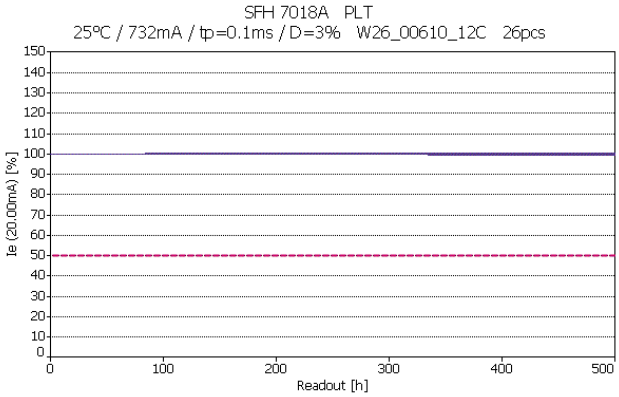
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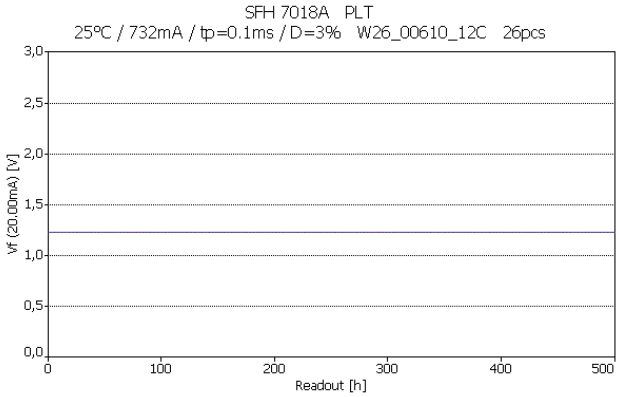
Readout [h]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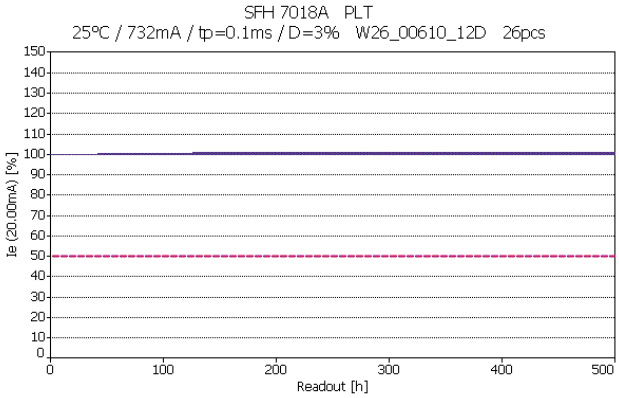
Readout [h]

Lot D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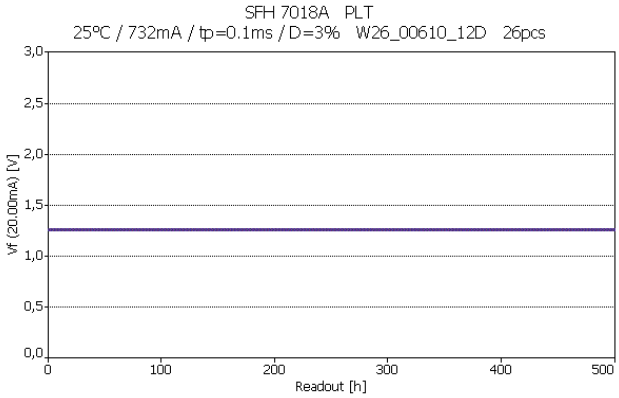
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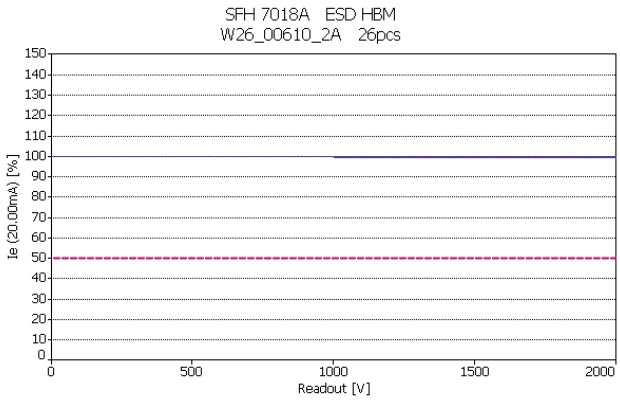
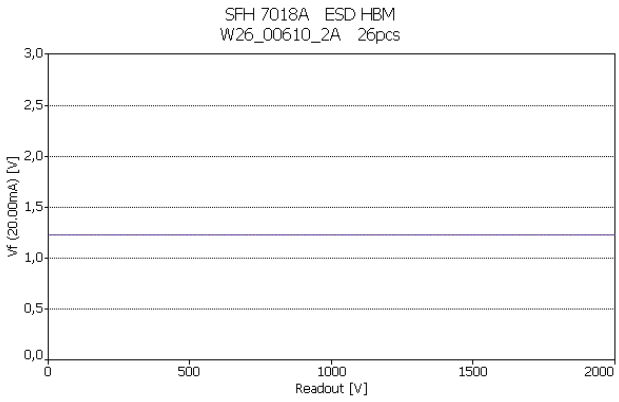
Readout [h]

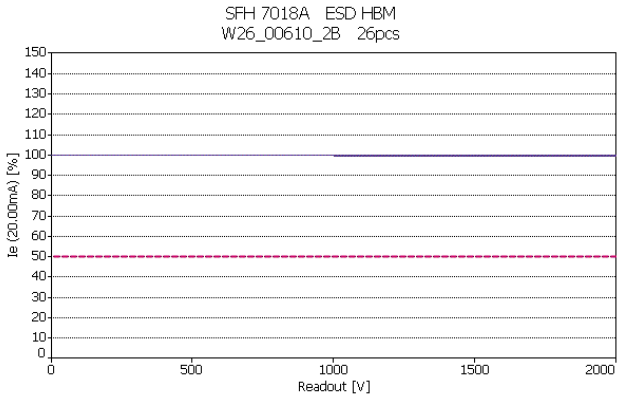
ESD Human Body Model

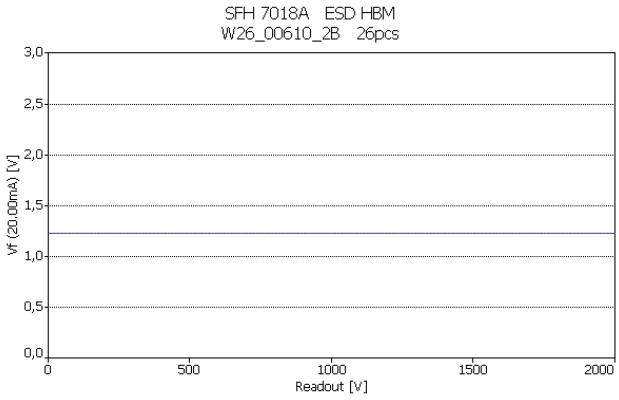
Lot A



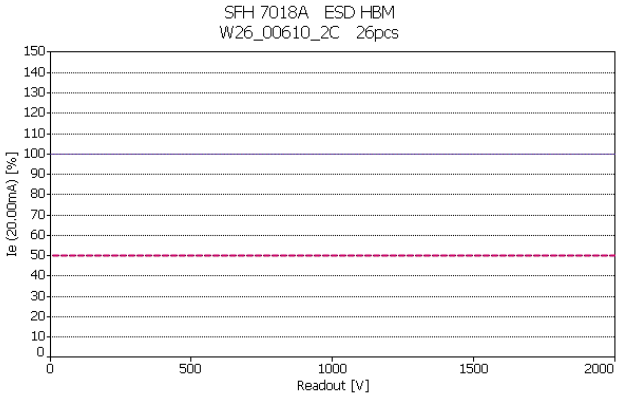


Lot B





Lot C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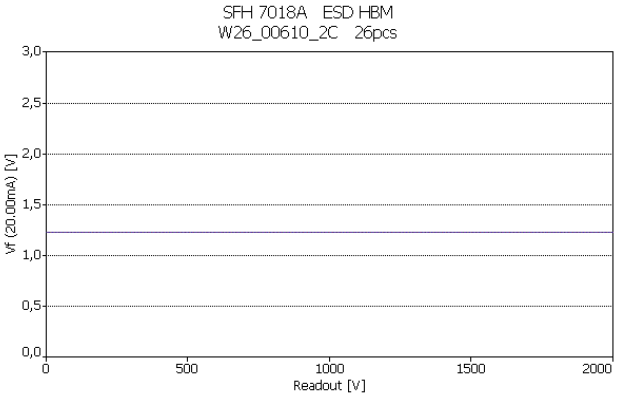
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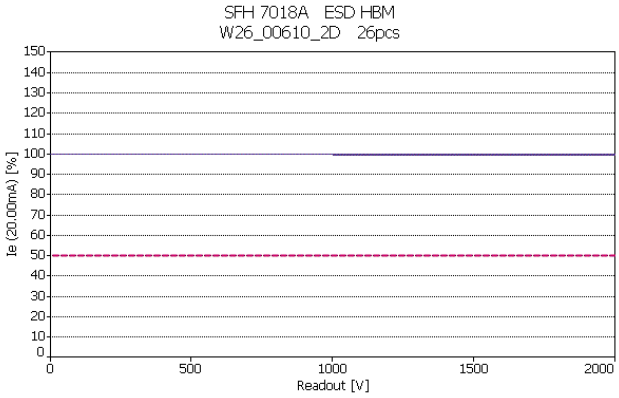
Vf (20.00mA) [V]
Readout [V]

Lot D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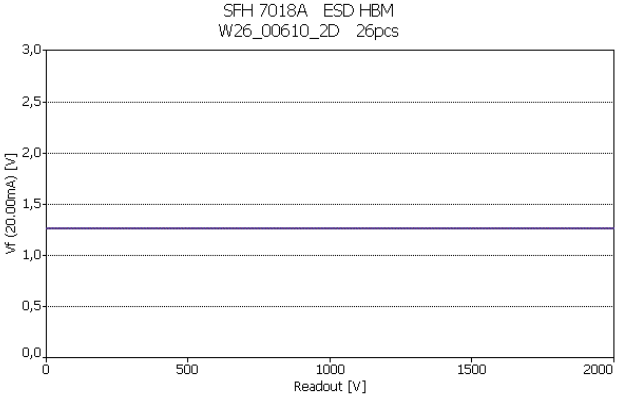
Readout [V]


SFH 7018A ESD HBM
W26_00610_2D 26pcs
Vf (20.00mA) [V]
Readout [V]

END OF DOCUMENT

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