

Control No. PCN-24121

March 21, 2024

**PRODUCT/PROCESS CHANGE NOTIFICATION**

**TYPE OF CHANGE:**       Design       Manufacturing       Other

This notification is provided in accordance with Power Integrations policy of change notification. If you have any questions or need further assistance, please contact your regional Power Integrations sales office.

**DESCRIPTION OF CHANGE**

An update to HiperPFS-5 product family changes the current protection limits at full power, 90% power, 80% power and 70% power as shown in the table below. These changes are reflected in revision F of the HiperPFS-5 datasheet.

V <sub>v</sub>	Current Data Sheet				New Data Sheet				V <sub>v</sub>	Current Data Sheet				New Data Sheet			
	< 2V			> 2.42V	< 2V			> 2.42V		< 2V			> 2.42V	< 2V			> 2.42V
Full Power	Min	Typ	Max	Typ	Min	Typ	Max	Typ	80% Power	Min	Typ	Max	Typ	Min	Typ	Max	Typ
PFS5x73F	3.14	3.3	3.47	2.2	2.8	3.1	3.3	2.1	PFS5x73F	2.46	2.7	2.86	1.9	2.4	2.6	2.8	1.7
PFS5x74F	4.94	5.2	5.46	3.5	4.5	4.8	5.1	3.3	PFS5x74F	3.88	4.2	4.51	2.9	3.7	4.1	4.4	2.7
PFS5x75F	5.41	5.7	5.98	3.8	5	5.3	5.6	3.6	PFS5x75F	4.19	4.5	4.87	3.2	4.1	4.5	4.8	3
PFS5x76F	6.56	6.9	7.25	4.7	6	6.4	6.8	4.3	PFS5x76F	5.13	5.6	5.97	3.9	4.9	5.4	5.8	3.6
PFS5x77F	7.6	8	8.4	5.5	7	7.5	7.9	5	PFS5x77F	6.06	6.6	7.04	4.2	5.8	6.3	6.7	4.2
PFS5x78F	9.22	9.7	10.19	6.5	8.5	9	9.5	6.1	PFS5x78F	7.22	7.8	8.39	4.6	7	7.6	8.1	5.1
SC2600F	-	-	-	-	6.4	7	7.5	4.7	SC2600F	-	-	-	-	5.4	5.9	6.3	4
SC2601F	-	-	-	-	8.5	9	9.5	6.1	SC2601F	-	-	-	-	7	7.6	8.1	5.1
90% Power	Min	Typ	Max	Typ	Min	Typ	Max	Typ	70% Power	Min	Typ	Max	Typ	Min	Typ	Max	Typ
PFS5x73F	2.76	3	3.21	2.1	2.6	2.8	3.1	1.9	PFS5x73F	2.16	2.3	2.51	1.6	2.2	2.3	2.5	1.6
PFS5x74F	4.34	4.7	5.04	3.3	4.1	4.4	4.8	3	PFS5x74F	3.41	3.7	3.96	2.6	3.4	3.7	4	2.5
PFS5x75F	4.73	5.1	5.5	3.6	4.5	4.9	5.3	3.3	PFS5x75F	3.67	4	4.27	2.8	3.7	4	4.3	2.7
PFS5x76F	5.74	6.2	6.68	4.3	5.4	5.9	6.4	4	PFS5x76F	4.55	4.9	5.29	3.4	4.6	4.9	5.3	3.3
PFS5x77F	6.72	7.3	7.81	5.1	6.3	6.9	7.4	4.6	PFS5x77F	5.37	5.8	6.24	4	5.4	5.7	6.2	3.9
PFS5x78F	8.11	8.8	9.43	6.2	7.6	8.3	8.9	5.6	PFS5x78F	6.25	6.8	7.26	3.6	6.3	6.8	7.3	4.6
SC2600F	-	-	-	-	5.9	6.4	6.9	4.4	SC2600F	-	-	-	-	5	5.3	5.6	3.6
SC2601F	-	-	-	-	7.6	8.3	8.9	5.6	SC2601F	-	-	-	-	6.2	6.8	7.4	4.6

**CONFIDENTIAL**

The information in this report contains confidential and proprietary information of Power Integrations and its manufacturing partners. By receiving this report, the customer agrees to use this information for the sole purpose of addressing the issues reviewed in this report and to keep the contents confidential. If it becomes necessary for the customer to disclose this information to a third party, a non-disclosure agreement, which provides reasonable and customary protection for the disclosed information, must be executed.

**REASON FOR CHANGE**

Manufacturability improvement.

**PRODUCTS AFFECTED**

PFS5173F-TL, PFS5174F-TL, PFS5175F-TL, PFS5176F-TL, PFS5177-TL, PFS5178F-TL, PFS5273F-TL, PFS5274F-TL, PFS5275F-TL, PFS5276F-TL, PFS5277F-TL, PFS5278F-TL, PFS5179F-TL, SC2600F-TL, SC2601F-TL

**QUALIFICATION STATUS**

Refer to Appendix 1 for the qualification data.

**EFFECT ON CUSTOMER**

Customer may notice a change in device operation in the application. Revised products are guaranteed to meet the new datasheet limits.

**EFFECTIVE DATE**

June 21, 2024. This date is subject to change. Products manufactured prior to the above-mentioned change will continue to be shipped after implementation of the change.

**SAMPLE AVAILABILITY**

Samples will be available 6 weeks from the date of request. Please send requests for samples within two weeks after receipt of this notification to the local Power Integrations sales office

**CONFIDENTIAL**



Appendix 1  
Reliability Engineering  
Qualification Report

Qualification Project: E240507

<b>Project Title: HiperPFS-5 Family Qualification of Data Sheet Over Current Protection Limit Changes</b>
<p><b>Qual Summary:</b></p> <p>Reliability testing was performed to qualify data sheet over current protection limit changes for the HiperPFS-5 product family. One lot of PFS5178F was subjected to DOPL with passing results to validate the specification changes. Based on these results, the over current protection limit changes for the HiperPFS-5 product family are qualified.</p>
Qualification Vehicles: INN4177C, INN3379C, INN3479C

**Reliability Test Descriptions and Conditions**

Test Name	Conditions	Reference Specification
DOPL (Dynamic Operating Life Test)	Tj=125°C, Vd_peak=440V	EIA/JESD22-A108
MSL3 Preconditioning	24-hr 150°C Bake +40-hr 60°C, 60% RH Moisture Soak + 3 Passes 260°C Solder Reflow	EIA/JESD22-A113

**DOPL (Dynamic Operating Life)**

Product	Lot #	Assembly Site	Test Duration	No. Failures/Sample Size
PFS5178C	MDU365A	Unisem	MSL3 + 168 hours	0 / 45

**Conclusion:** Based on passing qualification results, data sheet over current protection limit changes are qualified and approved for the HiperPFS-5 product family.

**CONFIDENTIAL**

**CUSTOMER ACKNOWLEDGEMENT**

Power Integrations requests you acknowledge the receipt of the above-mentioned PCN. If no acknowledgment is received within 30 days of this notification, Power Integrations will assume the change is acceptable. Lack of any additional response within 90 days of this notification further constitutes acceptance of the change.

Power Integrations reserves the right to ship either version manufactured after the effective date until the inventory of the earlier version has been depleted.

If you have any questions or need further assistance, please contact your regional Power Integrations sales office. Otherwise, please check the box below, acknowledging the receipt of the PCN.

**The indicated Product/Process Change Notification was received by the undersigned authority.**

Name/Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Email Address/Phone#: \_\_\_\_\_

Company/Location: \_\_\_\_\_

**CUSTOMER COMMENTS**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please email this signed form to [pcn@power.com](mailto:pcn@power.com) specifying the PCN# in the subject.

**CONFIDENTIAL**