Littelfuse
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LF PCN# A0059 Notification of change in FP1 (168.6585.XXXX series) Resin change.

Dear Valued Customer,
Littelfuse Inc. would like to notify you of a change in the 1A – 15A ratings of the FP1 PCB fuse (168.6585.XXXX series).
Currently, two different resins are used for the FP1 Series:

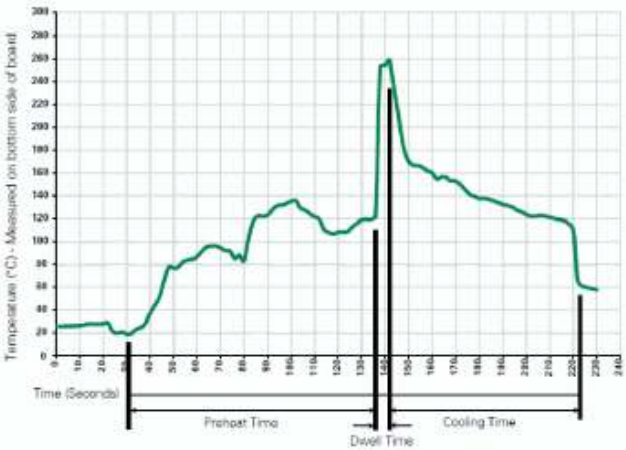
1A-15A → MAKROLON
20A-30A & SHUNT → VALOX

- The housing resin for the 1A-15A will change from MAKROLON to VALOX. This will result in the entire FP1 Series using VALOX (1A - 30A & SHUNT).
- The conversion of the FP1's lower amperage ratings to VALOX resin results in improved performance with wave soldering since VALOX has a higher softening point than MAKROLON.

  Softening point of the resins:
  - MAKROLON145ºC
  - VALOX 200 ºC

  The VALOX resin housings performed well when tested to our recommended wave soldering process parameters shown below –

Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260° C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350° C +/- 5°C
Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

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Impacted part numbers:

168.6585.4102	FUSE - FP1 32VDC/1000A, PCB 1A 1500 PC
168.6585.4202	FUSE - FP1 32VDC/1000A, PCB 2A 1500 PC
168.6585.4302	FUSE - FP1 32VDC/1000A, PCB 3A 1500 PC
168.6585.4402	FUSE - FP1 32VDC/1000A, PCB 4A 1500 PC
168.6585.4502	FUSE - FP1 32VDC/1000A, PCB 5A 1500 PC
168.6585.4752	FUSE - FP1 32VDC/1000A, PCB 7.5A 1500 PC
168.6585.5102	FUSE - FP1 32VDC/1000A, PCB 10A 1500 PC
168.6585.5152	FUSE - FP1 32VDC/1000A, PCB 15A 1500 PC
168.6585.4106	Fuse - FP1 32VDC/1000A, PCB 1A 100 pc
168.6585.4206	Fuse - FP1 32VDC/1000A, PCB 2A 100 pc
168.6585.4306	Fuse - FP1 32VDC/1000A, PCB 3A 100 pc
168.6585.4406	Fuse - FP1 32VDC/1000A, PCB 4A 100 pc
168.6585.4506	Fuse - FP1 32VDC/1000A, PCB 5A 100 pc
168.6585.4756	Fuse - FP1 32VDC/1000A, PCB 7.5A 100 pc
168.6585.5106	Fuse - FP1 32VDC/1000A, PCB 10A 100 pc
168.6585.5156	Fuse - FP1 32VDC/1000A, PCB 15A 100 pc

Please contact your local Littelfuse representative if you have any additional questions. We will be pleased to answer any questions you may have.

Thank you for your continued support.

Best Regards,

Jenny Kiolbasa

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