

Würth Elektronik eiSos GmbH & Co. KG

EMC & Inductive Solutions

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Product / Process Change Notification (PCN)

- Major change
 Minor change

PCN #: PCN_171031801_20220215

Affected Series: WPME-VDLM-171031801

PCN Date: November 19, 2021

Effective Date: February 15, 2022

Change Category:

- Equipment / Location
 General Data
 Material
 Process
 Product Design
 Shipping / Packaging
 Supplier
 Software

Contact: Product Management

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Data Sheet Change:

Yes No

Attachment:

Yes No

DESCRIPTION AND PURPOSE OF CHANGE:

To meet current customer demands, Würth Elektronik has updated the thermal derating diagram in the data sheet to ease reader comprehension.

To improve the processability, Würth Elektronik has changed the molding compound and internal solder paste.

In line with internal standardization, the matchcode for this product has been updated.

All products with date code 2022-01-03 or later, will be affected by the mold compound and solder paste change.

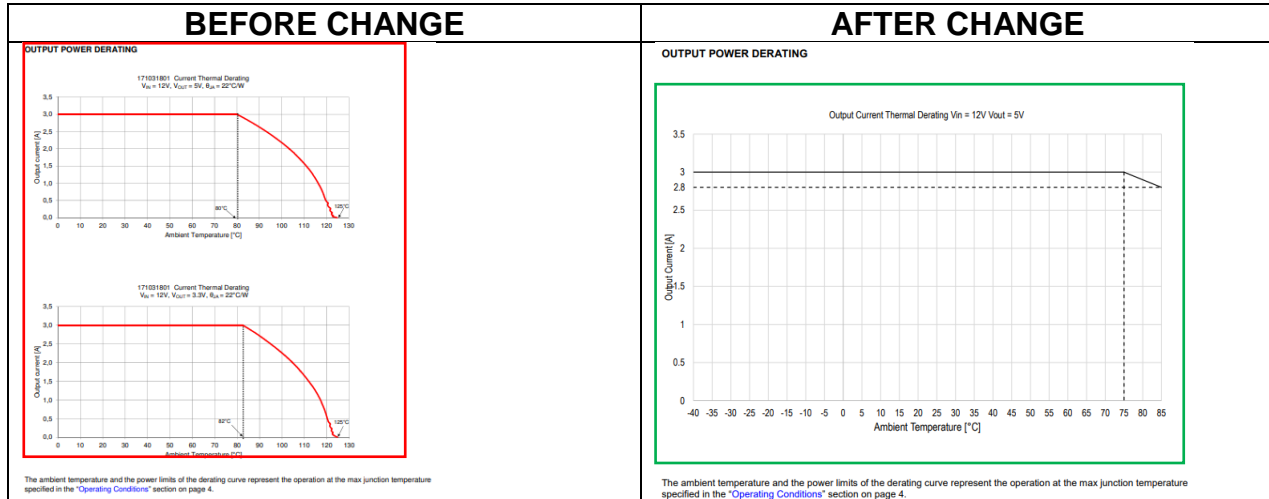
All products are retroactively and prospectively affected by this change of thermal derating and match code.

There will be no change in form, fit, quality or reliability of the product.



DETAIL OF CHANGE:

The thermal derating diagram of the module has been updated to increase the ease of reader comprehension. The thermal derating has been adjusted and will require attention of the user to ensure it is operating within the allowable range indicated.



The molding compound section in the package specification has been updated.

BEFORE CHANGE	AFTER CHANGE																														
<p>PACKAGE SPECIFICATIONS</p> <table border="1"> <thead> <tr> <th colspan="4">MOLD COMPOUND</th> <th>WEIGHT</th> </tr> <tr> <th>Part Number</th> <th>Material</th> <th>UL Class</th> <th>Certificate Number</th> <th></th> </tr> </thead> <tbody> <tr> <td>171031801</td> <td>EME-G760L</td> <td>UL94V-0</td> <td>E41429</td> <td>0.8 g</td> </tr> </tbody> </table>	MOLD COMPOUND				WEIGHT	Part Number	Material	UL Class	Certificate Number		171031801	EME-G760L	UL94V-0	E41429	0.8 g	<p>PACKAGE SPECIFICATIONS</p> <table border="1"> <thead> <tr> <th colspan="4">MOLD COMPOUND</th> <th>WEIGHT</th> </tr> <tr> <th>Part Number</th> <th>Material</th> <th>Certificate Number</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>171031801</td> <td>EME-E670E</td> <td>E41429</td> <td></td> <td>0.8 g</td> </tr> </tbody> </table>	MOLD COMPOUND				WEIGHT	Part Number	Material	Certificate Number			171031801	EME-E670E	E41429		0.8 g
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The product matchcode has been changed from VDRM to WPME-VDLM.

BEFORE CHANGE	AFTER CHANGE
<p>WPMDL1301801 / 171031801</p> <p>MagI³C Power Module</p> <p>VDRM – Variable Step Down Regulator Module</p>	<p>171031801</p> <p>MagI³C Power Module</p> <p>WPME-VDLM – Variable Step Down LGA Module</p>

RELIABILITY / QUALIFICATION SUMMARY:

Thermal measurements were performed to validate the new derating curve indicated in the data sheet.

The following reliability tests were performed to verify the robustness of the new mold compound and solder paste:

- Five times reflow / WE Standard
- High temperature storage lifetime / JESD22-A103
- Low temperature storage lifetime / JESD22-A119A
- Temperature cycling with preconditioning / JESD22-A104/-A113G
- Unbiased humidity and stress test / JESD22-A118B
- Mechanical vibration test / MIL-STD-202 Method 204
- Mechanical shock test / MIL-STD-202 Method 213

All test results indicated satisfactory reliability performance.