



| C | 2018-4    |   |                     |  |  |
|---|-----------|---|---------------------|--|--|
| D | 2019-1-12 | 1 |                     |  |  |
| E | 2020-1-3  |   | SX      Rdson<br>50 |  |  |
| F | 2021-4-13 | 2 | 3230                |  |  |
|   |           |   |                     |  |  |
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|   |           |   |                     |  |  |



Rev. F Apr.-2021

BRCL3130MC / BRCL3130MC  
MOSFET  
BRCL3130MC SOT23-3  
BRCL3130MC

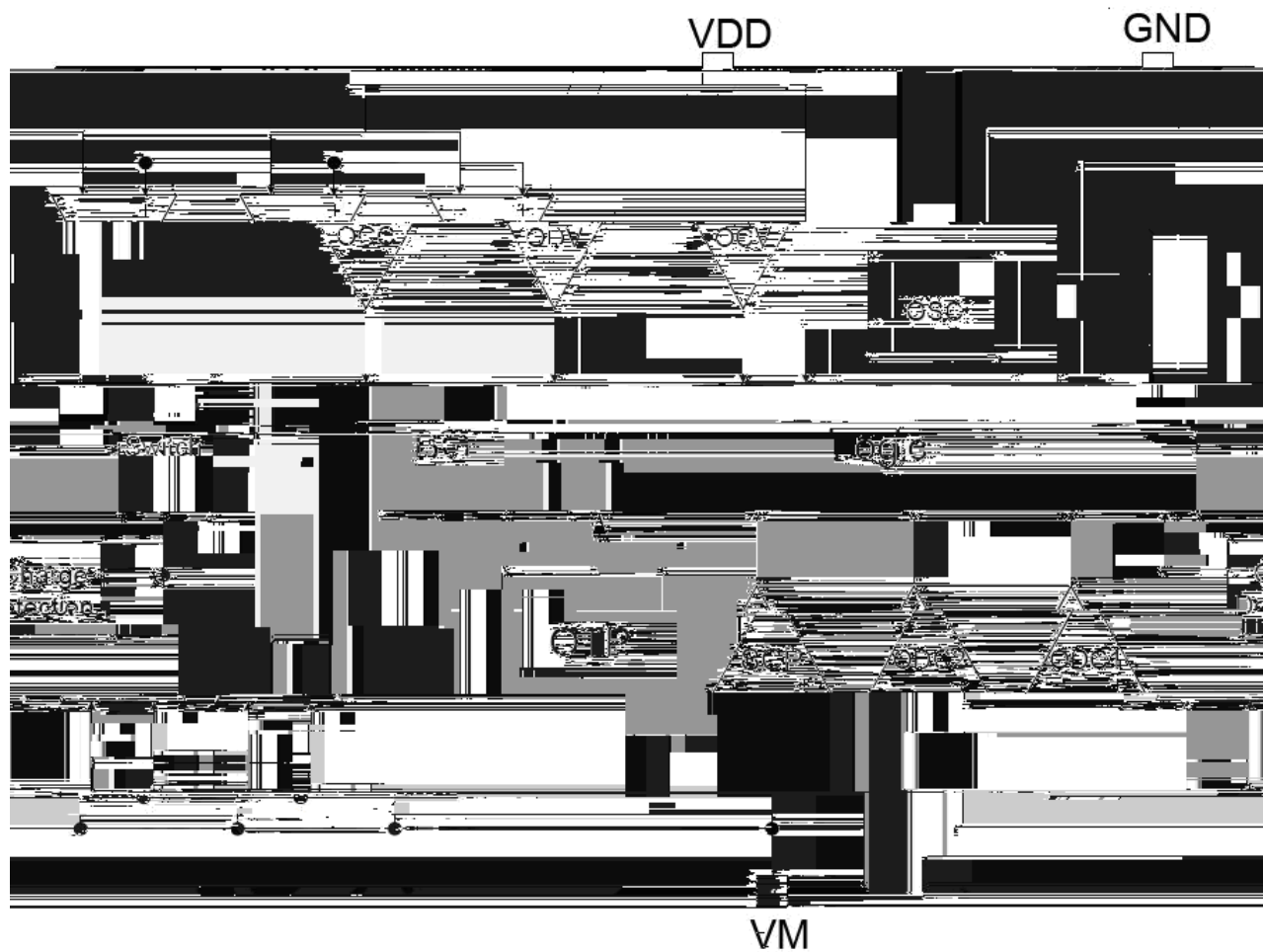
The BRCL3130MC series product is a high integration solution for lithium-ion/polymer battery protection. BRCL3130MC contains advanced power MOSFET, high-

Rev. F Apr.-2021



Rev. F Apr.-2021

| /Parameter                        | /Symbol          | /Value       | /Unit      |
|-----------------------------------|------------------|--------------|------------|
| V <sub>DD</sub> input pin voltage | V <sub>IN</sub>  | -0.3 to +6.0 | V          |
| V <sub>M</sub> input pin voltage  | V <sub>VM</sub>  | -6.0 to +10  | V          |
| Power Dissipation                 | P <sub>D</sub>   | 400          | mW         |
| Maximum Junction Temperature      | T <sub>J</sub>   | 125          | °C         |
| Lead Temperature                  | T <sub>L</sub>   | 300          | °C         |
| Operating Junction Temperature    | T <sub>opr</sub> | -40 to +85   | °C Operati |



BRCL3130MC

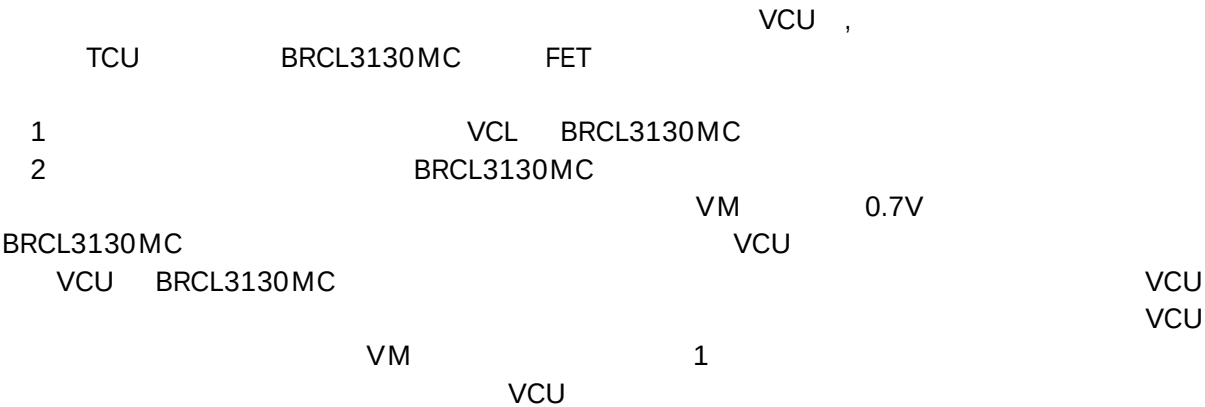
MOSFET

50mΩ

The BRCL3130MC monitors the voltage and current of a battery and protects it from being damaged due to overcharge voltage, overdischarge voltage, overdischarge current, and short circuit conditions by discon



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TDL

BRCL3130MC

VDL

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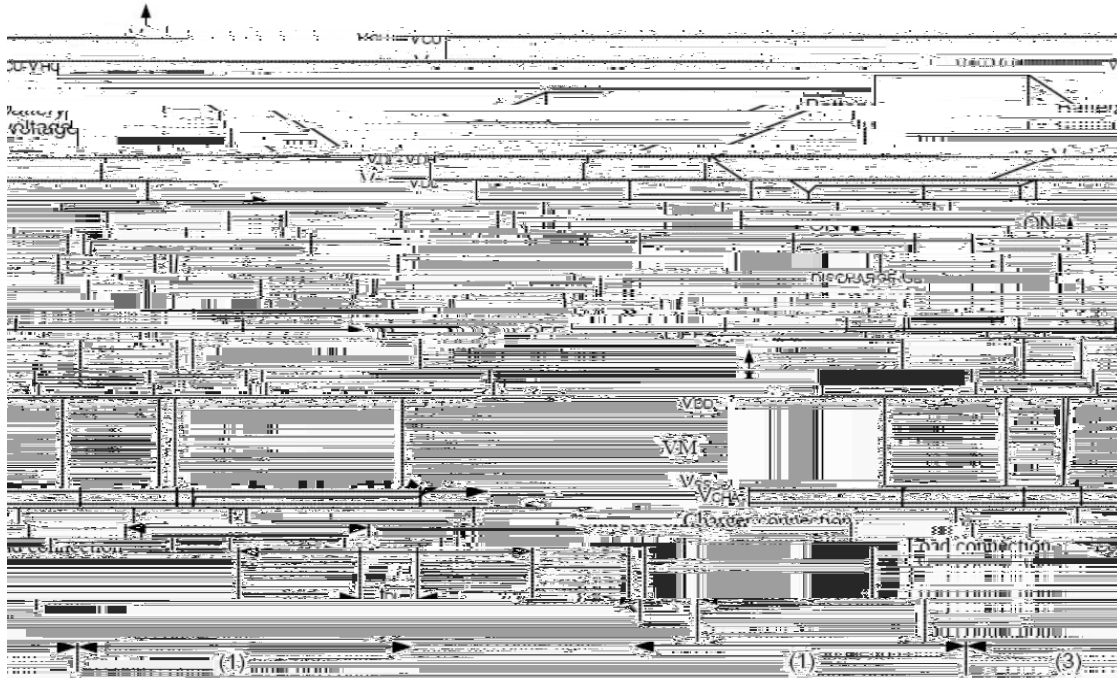
Rev. F Apr.-2021



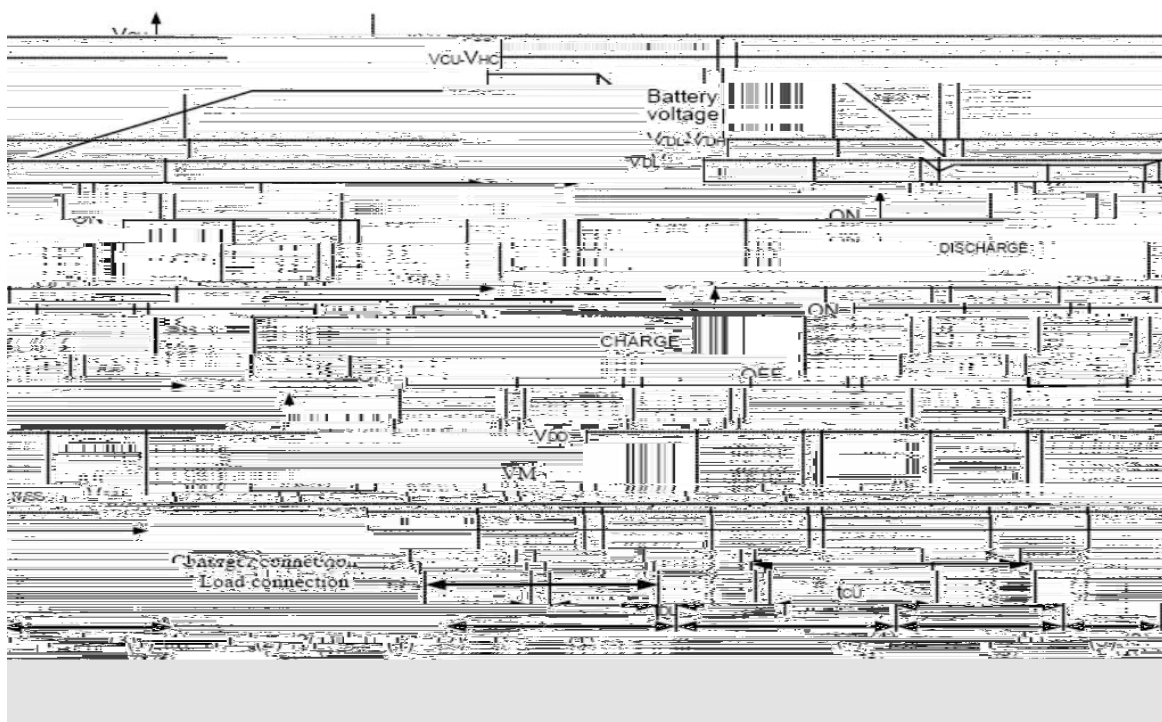
Rev. F Apr.-2021

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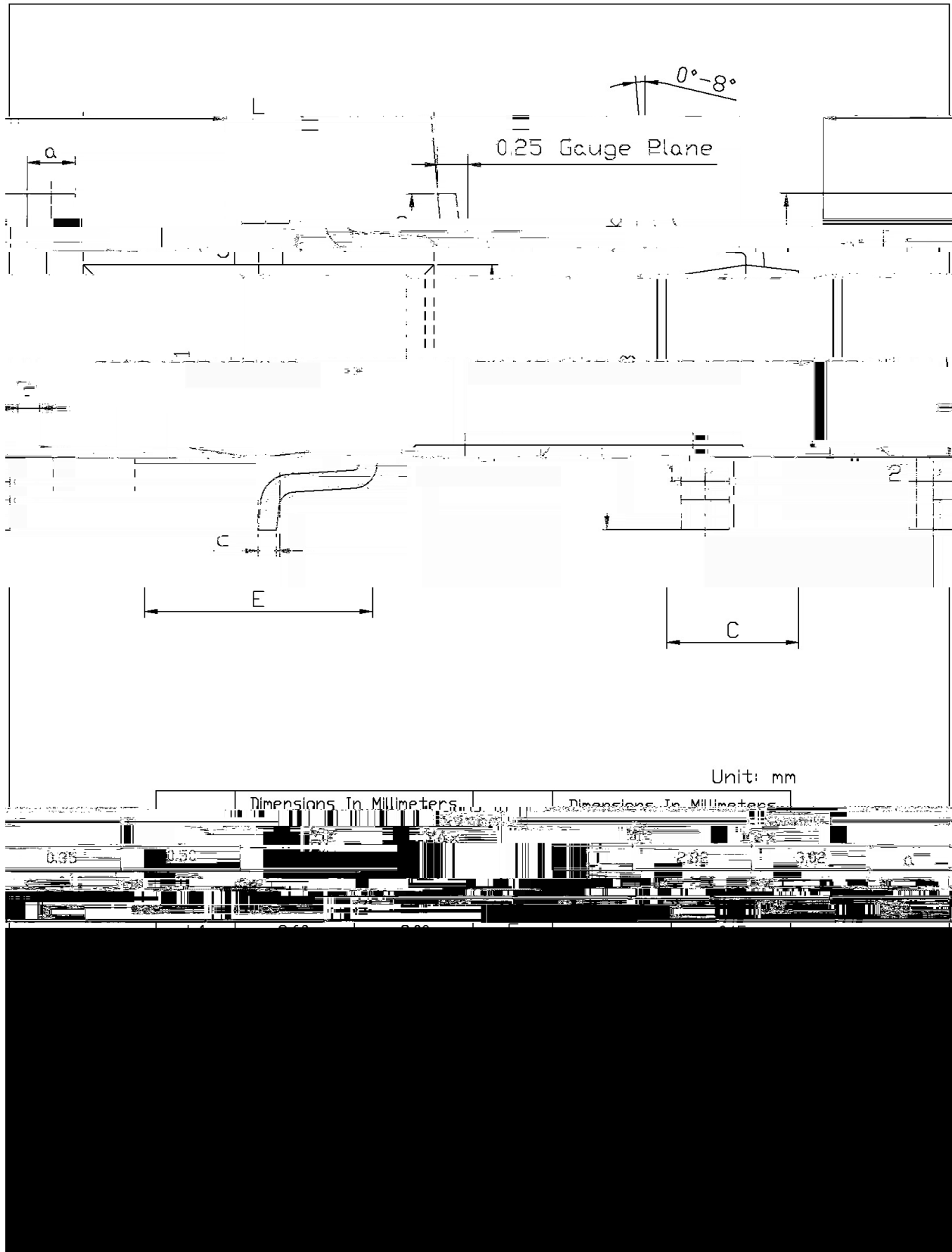
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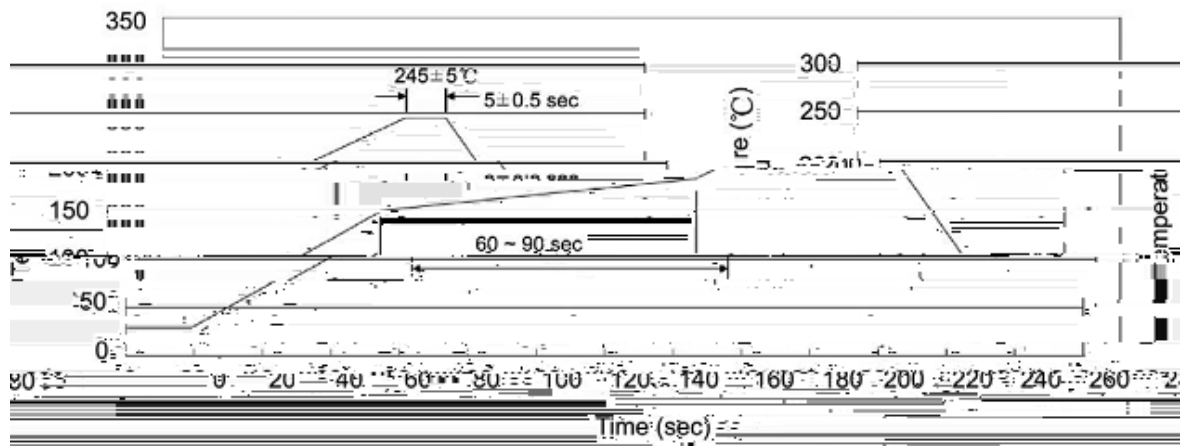
Notes: (1) Normal condition (2) Overcharge voltage condition (3) Overdischarge voltage condition (4) Overcurrent condition



Rev. F Apr.-2021



Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- |   |       |     |           |                                             |                                           |
|---|-------|-----|-----------|---------------------------------------------|-------------------------------------------|
| 1 | 150   | 180 | 60        | 90sec;                                      | 1. Preheating: 150~180°C, Time: 60~90sec. |
| 2 | 245±5 |     | 5±0.5sec; | 2. Peak Temp.: 245±5°C, Duration: 5±0.5sec. |                                           |
| 3 |       | 2   | 10°C/sec. | 3. Cooling Speed: 2~10°C/sec.               |                                           |

|         |           |                |                |
|---------|-----------|----------------|----------------|
| 260±5°C | 10±1 sec. | Temp.: 260±5°C | Time: 10±1 sec |
|---------|-----------|----------------|----------------|

/ REEL

|            |  |   |
|------------|--|---|
|            |  | 3 |
| Units/Reel |  |   |