

## / Revised record

| 版本 | 修订日期     | 有修订的页码 | 修订涉及的内容                                                                                                                           | 拟制  | 审核  |
|----|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| A  | 2022.7.5 | 全部     | 参考 AOS-AON2812和<br>AOS-AON2260(SOA,RJA)首次<br>创建  | 庞隆基 | 陈逸晞 |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |
|    |          |        |                                                                                                                                   |     |     |

### / Descriptions

DFN 2×2C-6L 塑封封装 N+N 沟道 MOS 场效应管。

Double N+N-CHANNEL MOSFET in a DFN 2×2C-6L Plastic Package.

### / Features

$V_{DS} (V) = 30V$

$I_D = 6.3A (V_{GS} = \pm 20V)$

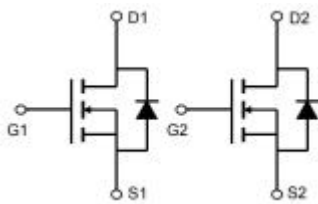
无卤产品。HF Product.

### / Applications

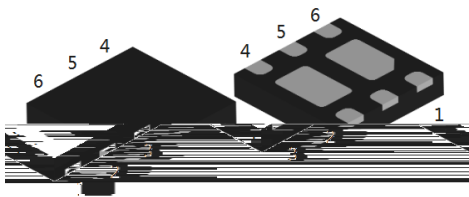
电池保护开关，移动设备电池充放电，负载开关。

Battery protection switch, Mobile device battery charging and discharging, Load switch.

### / Equivalent Circuit



### / Pinning



| 出脚    | 定义 |
|-------|----|
| PIN 1 | S1 |
| PIN 2 | G1 |
| PIN 3 | D2 |
| PIN 4 | S2 |
| PIN 5 | G2 |
| PIN 6 | D1 |

### / Marking

见印章说明 See Marking Instructions.



| Parameter                              |                     | Symbol                       | Rating      | Unit |
|----------------------------------------|---------------------|------------------------------|-------------|------|
| Drain-Source Voltage                   |                     | $V_{DSS}$                    | 30          | V    |
| Gate-Source Voltage                    |                     | $V_{GSS}$                    | $\pm 20$    | V    |
| Continuous Drain Current               |                     | $I_D (T_a=25^\circ\text{C})$ | 6.3         | A    |
| Pulsed Drain Current                   |                     | $I_{DM}$                     | 25          | A    |
| Power Dissipation for Single Operation |                     | $P_D (T_a=25^\circ\text{C})$ | 2.8         | W    |
| Junction and Storage Temperature Range |                     | $T_J, T_{STG}$               | -55 to +150 |      |
| Maximum Junction-to-Ambient            | $t \leq 10\text{s}$ | $R_{\theta JA}$              | 44.6        | mW   |
|                                        | Steady-State        | $R_{\theta JA}$              | 71.4        |      |

| Parameter                         | Symbol       | Test Conditions                            | Min | Typ | Max | Unit       |
|-----------------------------------|--------------|--------------------------------------------|-----|-----|-----|------------|
| Drain-Source Breakdown Voltage    | $BV_{DSS}$   | $V_{GS}=0V$ $I_D=250\mu A$                 | 30  | 35  |     | V          |
| Zero Gate Voltage Drain Current   | $I_{DSS}$    | $V_{DS}=30V$ $V_{GS}=0V$                   |     |     | 1.0 | $\mu A$    |
| Gate-Body leakage current         | $I_{GSS}$    | $V_{GS}=\pm 20V$ $V_{DS}=0V$               |     |     | 100 | nA         |
| Gate Threshold Voltage            | $V_{GS(th)}$ | $V_{DS}=V_{GS}$ $I_D=250\mu A$             | 1.0 | 1.7 | 2.5 | V          |
| Static Drain-Source On-Resistance | $R_{DS(on)}$ | $V_{GS}=10V$ $I_D=9A$                      |     | 20  | 22  | m $\Omega$ |
|                                   |              | $V_{GS}=4.5V$ $I_D=7A$                     |     | 31  | 35  | m $\Omega$ |
| Diode Forward Voltage             | $V_{SD}$     | $V_{GS}=0V$ $I_S=1.0A$                     |     |     | 1.2 | V          |
| Input Capacitance                 | $C_{iss}$    | $V_{DS}=25V$ $V_{GS}=0V$ $f=1.0\text{MHz}$ |     | 690 |     | pF         |
| Output Capacitance                | $C_{oss}$    |                                            |     | 200 |     | pF         |
| Reverse Transfer Capacitance      | $C_{rss}$    |                                            |     | 130 |     | pF         |

**BRCS200N03YN**

Rev.A Jul.-2022

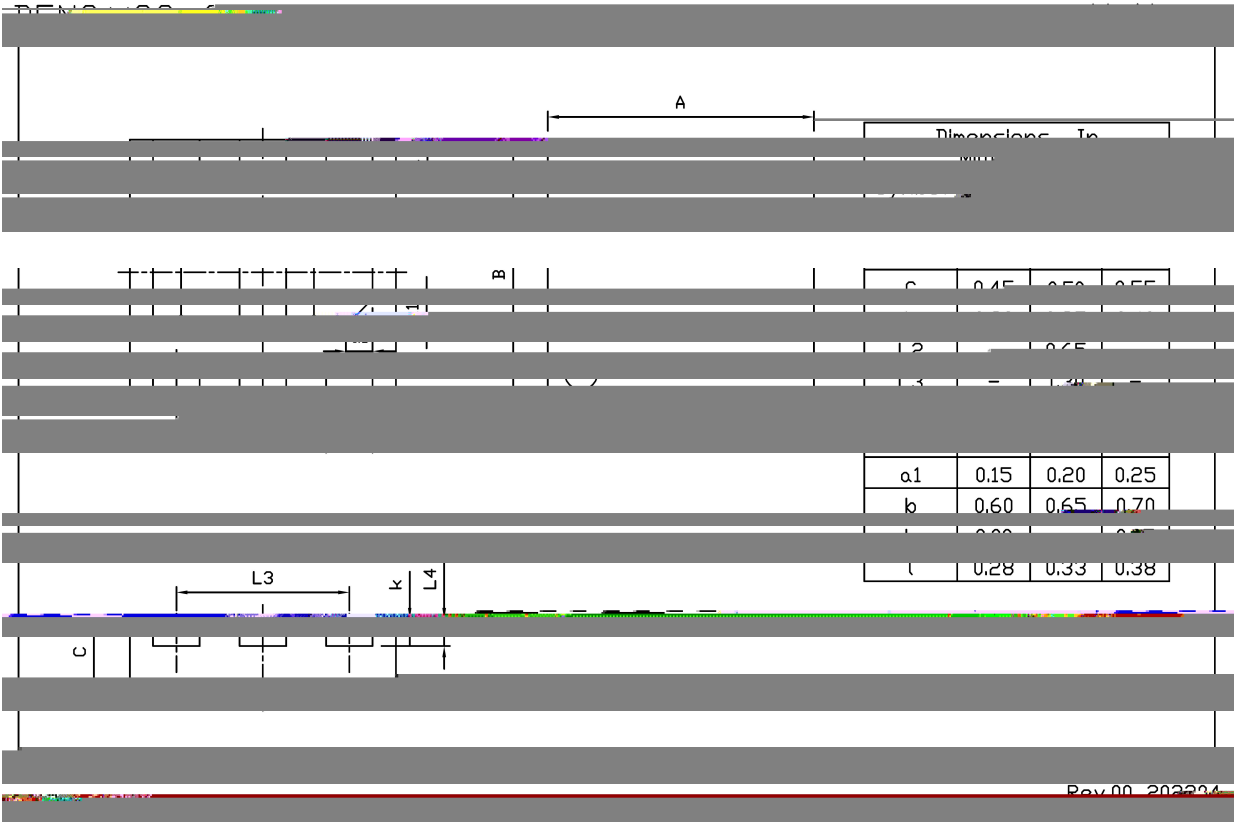
**DATA SHEET**

**BRCS200N03YN**

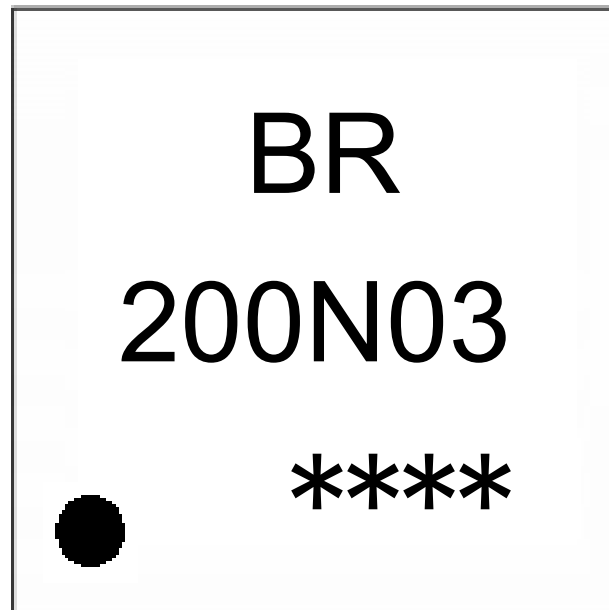
Rev.A Jul.-2022

**DATA SHEET**

/ Package Dimensions



/ Marking Instructions



BR

200N03

\*\*\*\*

Note:

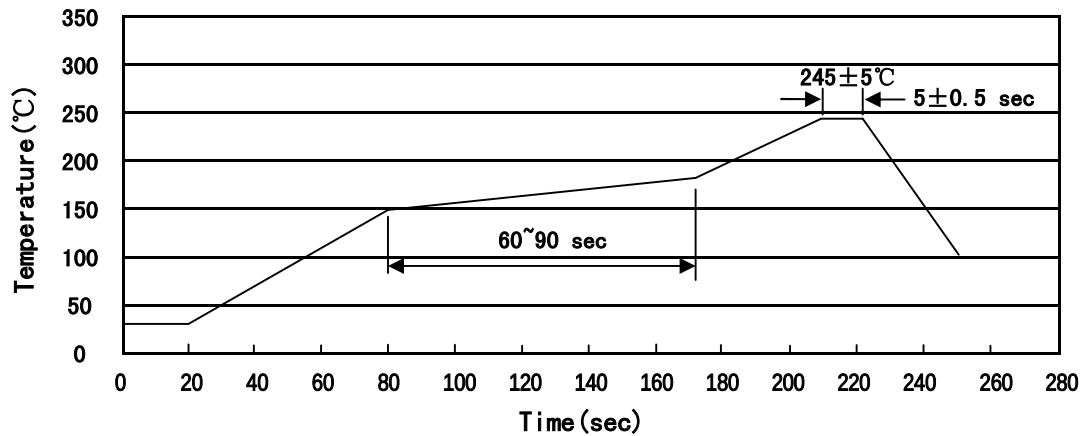
BR: Company Code

200N03: Product Type

\*\*\*\*: Lot No. Code, code change with Lot No



( ) /



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.            |

## / Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5

Time:10±1 sec

## / Packaging SPEC.

/ REEL

| Package Type | Units |  |  |  |  | Dimension (unit mm <sup>3</sup> ) |  |  |
|--------------|-------|--|--|--|--|-----------------------------------|--|--|
|              |       |  |  |  |  |                                   |  |  |
| ×            |       |  |  |  |  | "                                 |  |  |

## / Notices