

## / Revised record

| A | 2019-4-18 | ALL | AO3400 |  |  |
|---|-----------|-----|--------|--|--|
| B | 2020-5-28 | 1   |        |  |  |
|   |           |     |        |  |  |
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|   |           |     |        |  |  |

**/ Descriptions**

SOT-23      N    MOS      - CHANNEL MOSFET in a SOT-23 Plastic Package.

**/ Features**

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

$I_D = 5.8 A (V_{GS} = 10V)$

$R_{DS(ON)} < 28m\Omega (V_{GS} = 10V)$

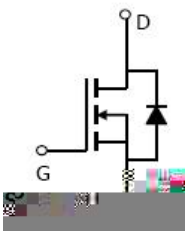
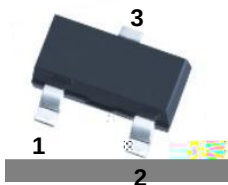
$R_{DS(ON)} < 33m\Omega (V_{GS} = 4.5V)$

$R_{DS(ON)} < 52m\Omega (V_{GS} = 2.5V)$

无卤产品。HF Product.

**/ Applications**

This device is suitable for use as a load switch or in PWM applications.

**/ Equivalent Circuit****/ Pinning**

PIN1   G      PIN 2   S      PIN 3   D

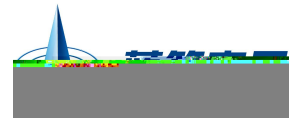
**/ Marking**

|         |     |
|---------|-----|
| Marking | A0H |
|---------|-----|

**BRCS3400MA**

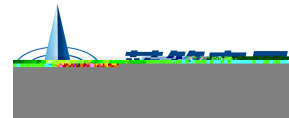
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**DATA SHEET**

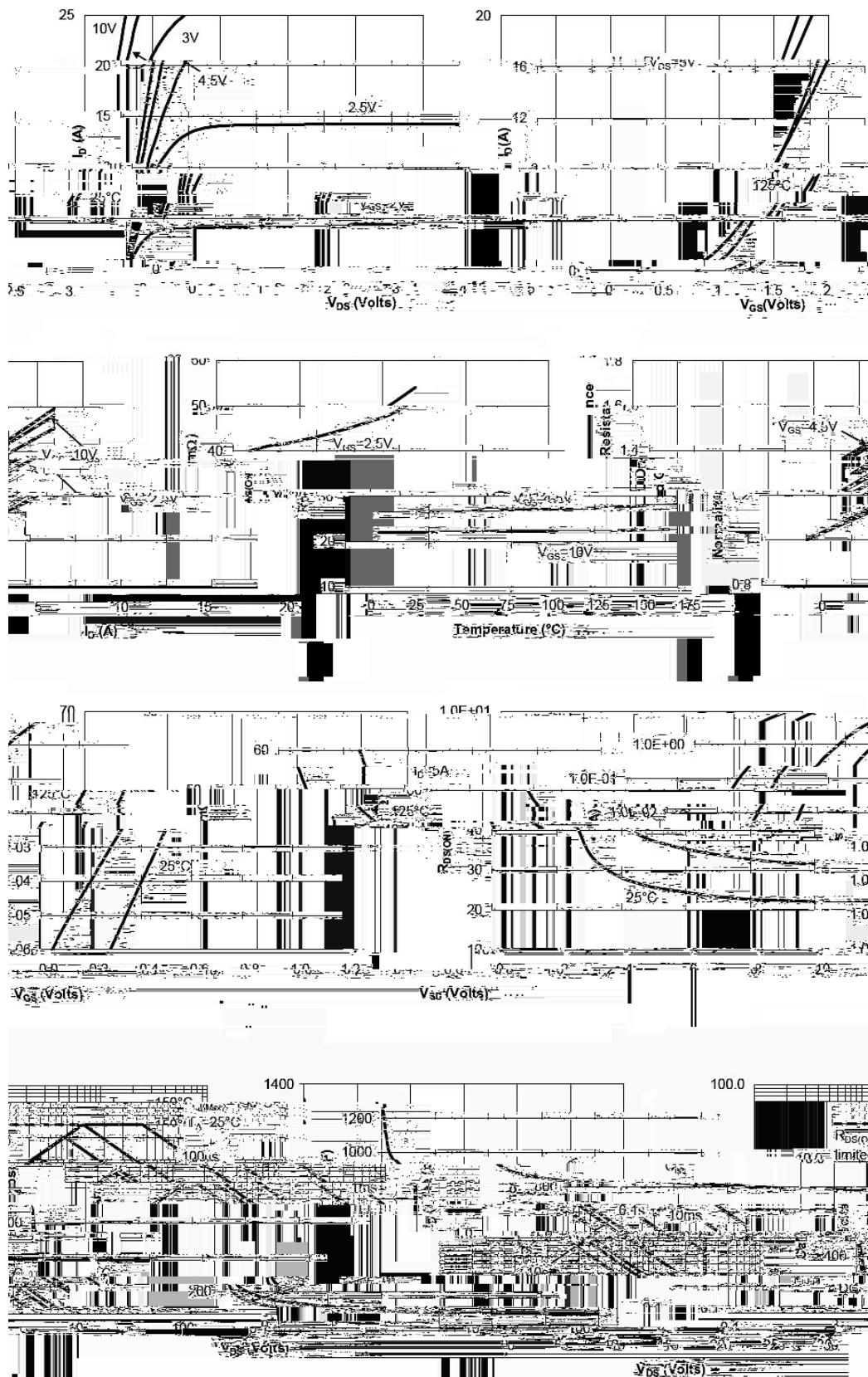


## / Electrical Characteristics(Ta=25 °C)

| Parameter                          | Symbol       | Test Conditions                                                | Min | Typ  | Max  | Unit     |
|------------------------------------|--------------|----------------------------------------------------------------|-----|------|------|----------|
| Input Capacitance                  | $C_{iss}$    | $V_{DS}=15V$ $V_{GS}=0V$<br>$f=1MHz$                           |     | 823  | 1030 | pF       |
| Output Capacitance                 | $C_{oss}$    |                                                                |     | 99   |      |          |
| Reverse Transfer Capacitance       | $C_{rss}$    |                                                                |     | 77   |      |          |
| Gate resistance                    | $R_g$        | $V_{GS}=0V$ $V_{DS}=0V$ ,<br>$f=1MHz$                          |     | 1.2  | 3.6  | $\Omega$ |
| Total Gate Charge                  | $Q_g$        | $V_{GS}=4.5V$ , $V_{DS}=15V$ ,<br>$I_D=5.8A$                   |     | 9.7  | 12   | nC       |
| Gate Source Charge                 | $Q_{gs}$     |                                                                |     | 1.6  |      |          |
| Gate Drain Charge                  | $Q_{gd}$     |                                                                |     | 3.1  |      |          |
| Turn-On Delay Time                 | $t_{d(on)}$  | $V_{GS}=10V$ $R_L=2.7\Omega$<br>$V_{DS}=15V$ $R_{GEN}=3\Omega$ |     | 3.3  | 5    | ns       |
| Turn-On Rise Time                  | $t_r$        |                                                                |     | 4.8  | 7    |          |
| Turn-Off Delay Time                | $t_{d(off)}$ |                                                                |     | 26.3 | 40   |          |
| Turn-Off Fall Time                 | $t_f$        |                                                                |     | 4.1  | 6    |          |
| Body Diode Reverse Recovery Time   | $t_{rr}$     | $I_F=5A$ $dI/dt=100A/\mu s$                                    |     | 16   | 20   | ns       |
| Body Diode Reverse Recovery Charge | $Q_{rr}$     | $I_F=5A$ $dI/dt=100A/\mu s$                                    |     | 8.9  | 12   | nC       |



**/ Electrical Characteristic Curve**

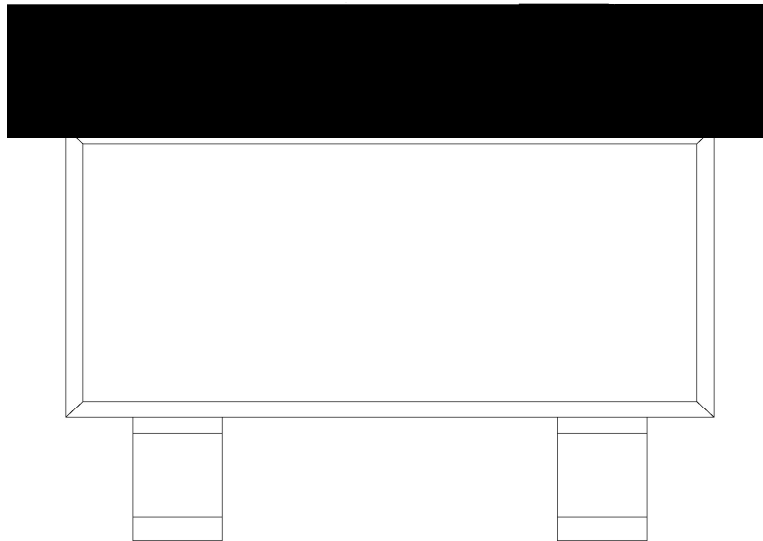


**BRCS3400MA**

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**DATA SHEET**

**/ Marking Instructions**



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Note:

(     ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

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

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type  
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