



# BRCS080N03ZCQ

Rev.A Dec.-2023

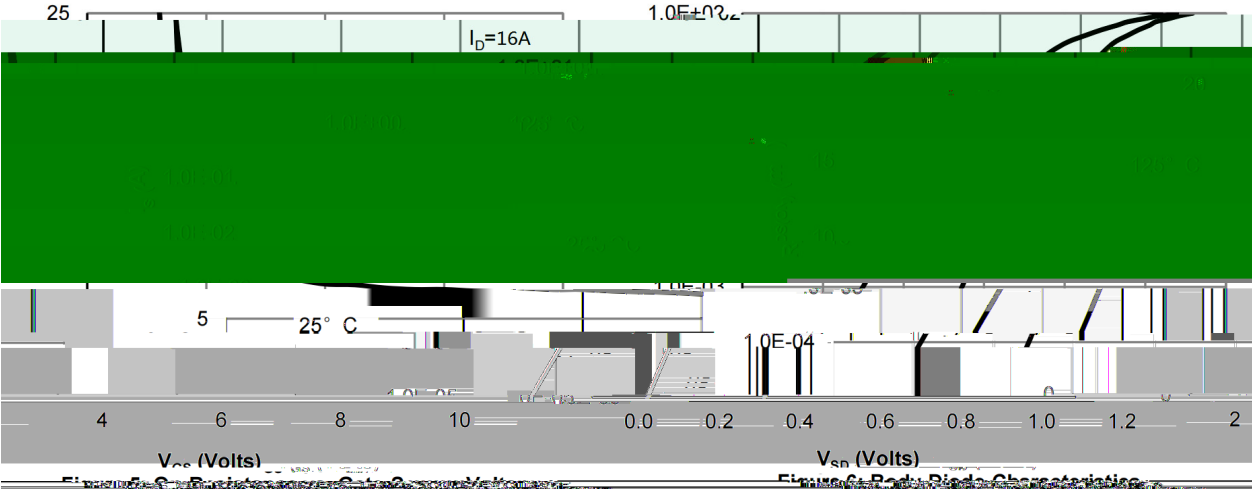
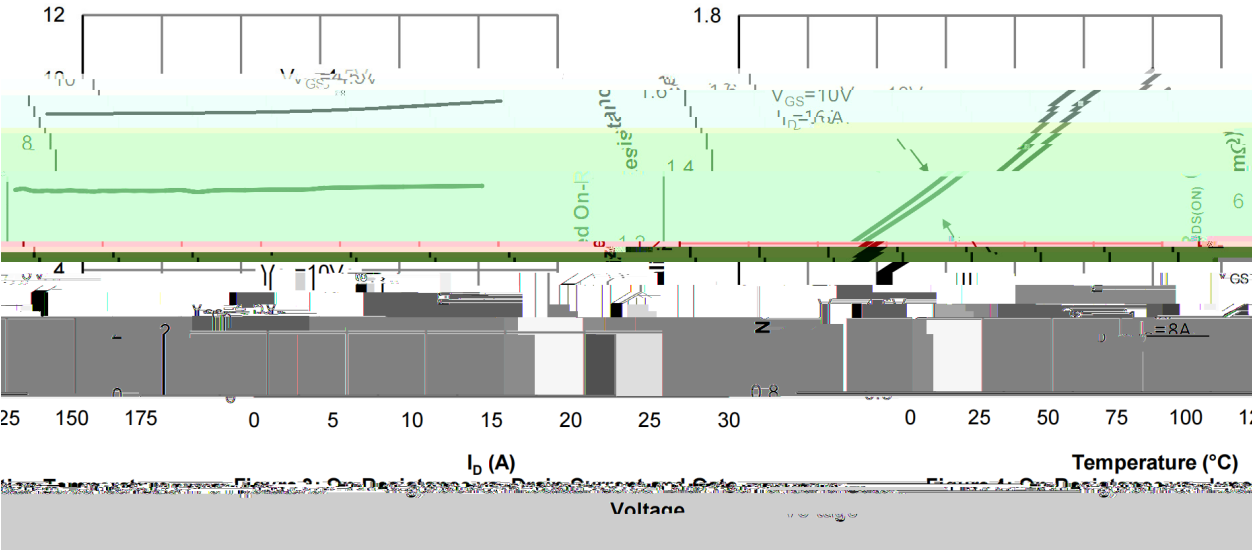
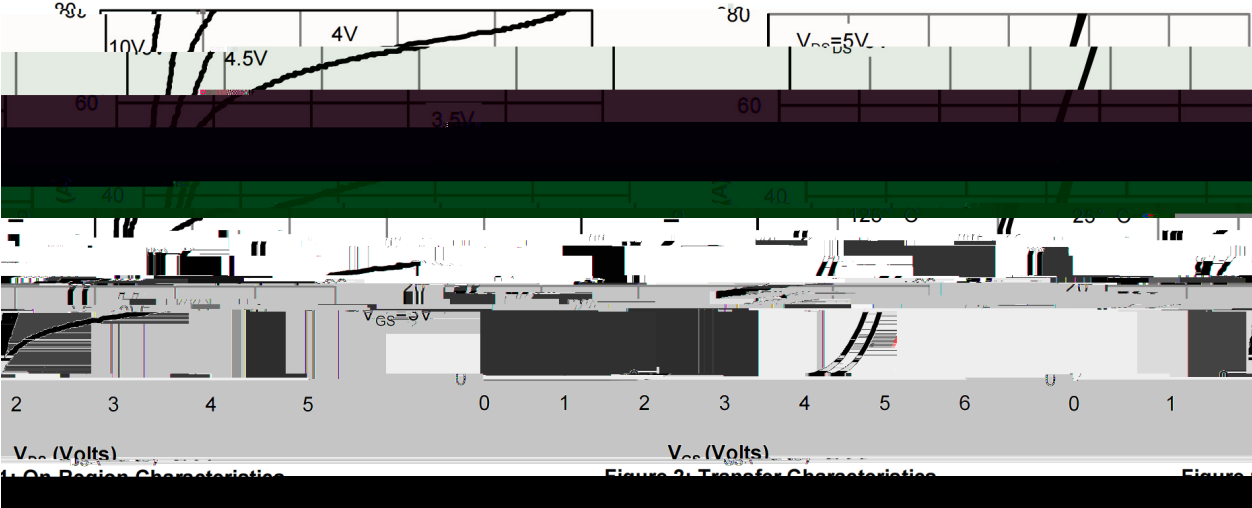


蓝箭电子  
BLUE ROCKET ELECTRONICS

DATA SHEET

| Parameter                              |              | Symbol                                 | Rating     | Unit |
|----------------------------------------|--------------|----------------------------------------|------------|------|
| Drain-Source Voltage                   |              | V <sub>DS</sub>                        | 30         | V    |
| Drain Current - Continuous             |              | I <sub>D</sub>                         | 30         | A    |
| Drain Current – Pulsed                 |              | I <sub>DM</sub>                        | 140        | A    |
| Gate-Source Voltage                    |              | V <sub>GS</sub>                        | ± 20       | V    |
| Power Dissipation                      |              | P <sub>D</sub> (T <sub>c</sub> =25 °C) | 31         | W    |
| Single Pulse Avalanche Energy(L=0.1mH) |              | E <sub>AS</sub>                        | 50         | mJ   |
| Avalanche Current(L=0.1mH)             |              | I <sub>AS</sub>                        | 22.5       | A    |
| Junction and Storage Temperature Range |              | T <sub>j</sub> , T <sub>stg</sub>      | -55 to 150 |      |
| Thermal resistance, junction - ambient | t ≤ 10s      | R <sub>θJA</sub>                       | 21         | / W  |
|                                        | Steady-State |                                        | 53         |      |

/ Electrical Characteristic Curve



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

|  |
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|  |
|  |
|  |
|  |
|  |
|  |

Note:

- 1

150    200

60    120sec;

1.Preheating:150~200    , Time:60~120sec.
- 2

255±5

5±0.5sec;

2.Peak Temp.:255±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