

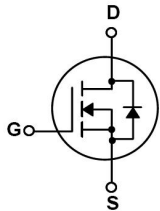
TO-252          N          MOS          N-CHANNEL MOSFET in a TO-252 Plastic Package.

$R_{DS(on)}$            $C_{rSS}$

Low  $R_{DS(on)}$ , low gate charge, low  $C_{rSS}$ , fast switching.

DC/DC

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.



PIN 1 G          PIN 2 D          PIN 3 S          PIN 4 D

See Marking Instructions.



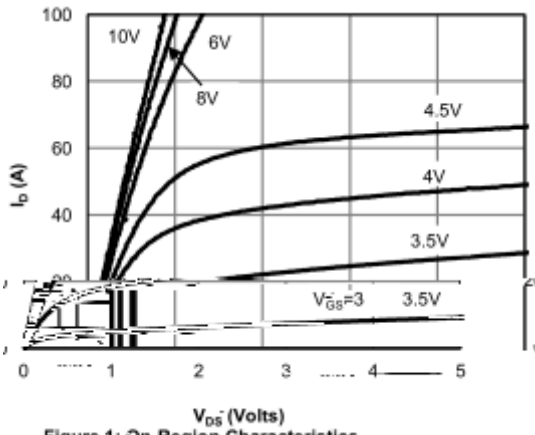


Figure 1: On-Region Characteristics

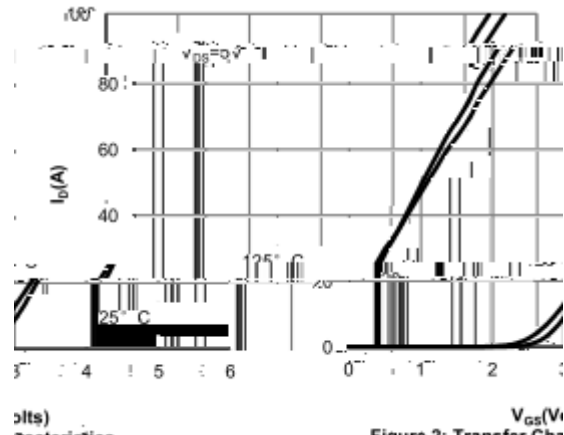


Figure 2: Transfer Characteristics

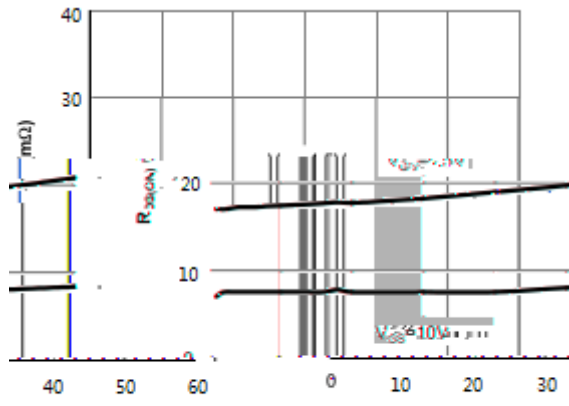

 (A)  $R_{DS(on)}$  vs. Drain Current and Gate Voltage

Figure 3: On-Resistance vs. Drain Current and Gate Voltage

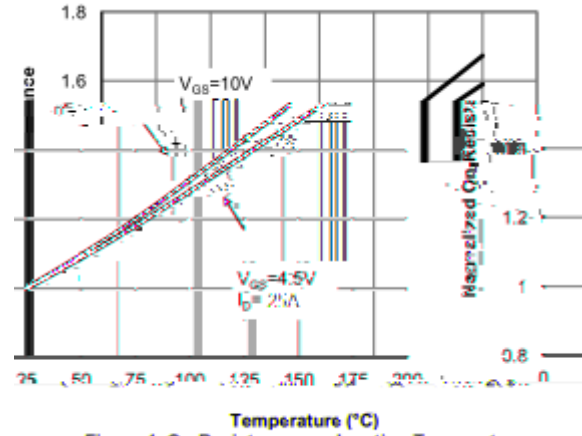


Figure 4: On-Resistance vs. Junction Temperature

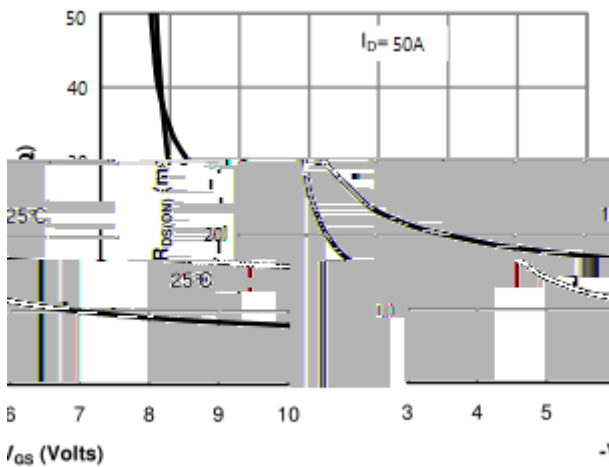


Figure 5: Body Diode Characteristics

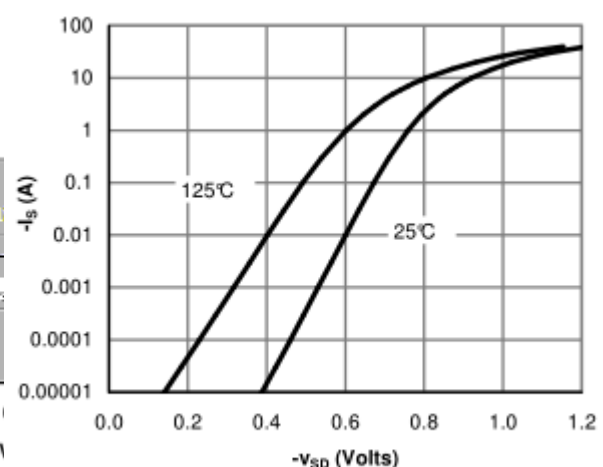
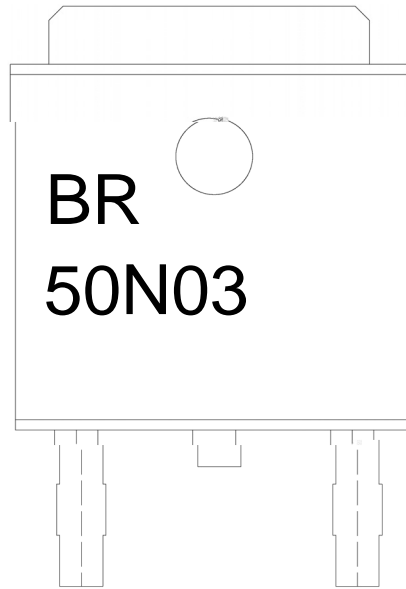


Figure 6: Body Diode Characteristics







BR

50N03

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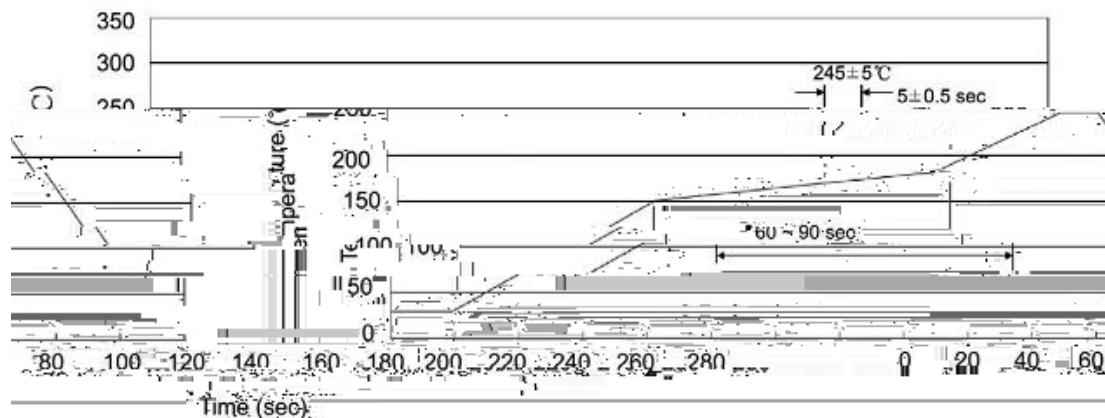
Note:

BR: Company Code

50N03: Product Type Code.

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

### 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.            |

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

/ REEL

Package Type	Units					Dimension (unit mm <sup>3</sup> )		

/ TUBE

Package Type	Units					Dimension (unit mm <sup>3</sup> )		