

BRD50N03

Rev.G Jul.-2018

/ Descriptions

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

/ Features

$R_{DS(on)}$ C_{rSS}

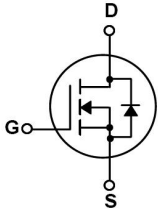
Low $R_{DS(on)}$, low gate charge, low C_{rSS} , fast switching.

/ Applications

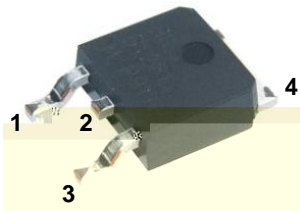
DC/DC

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

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S PIN 4 D

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Electrical Characteristic Curve

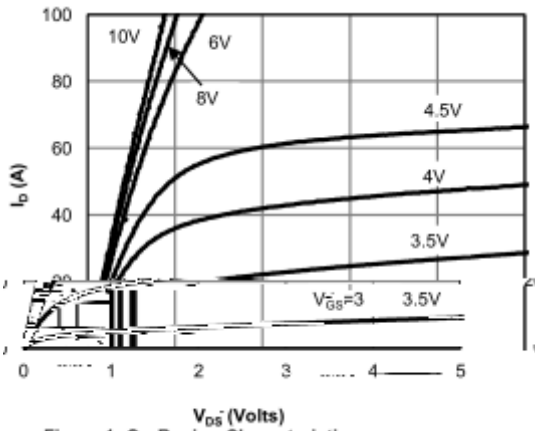


Figure 1: On-Region Characteristics

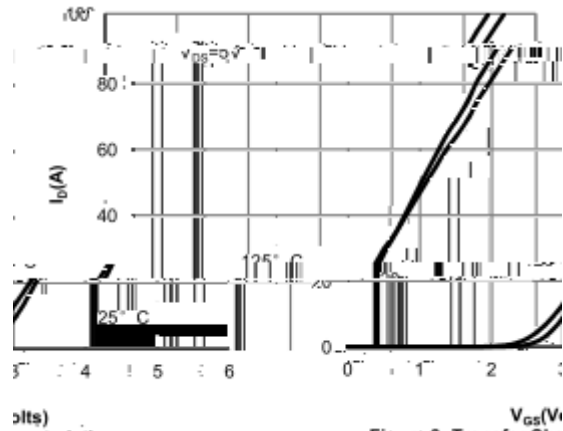
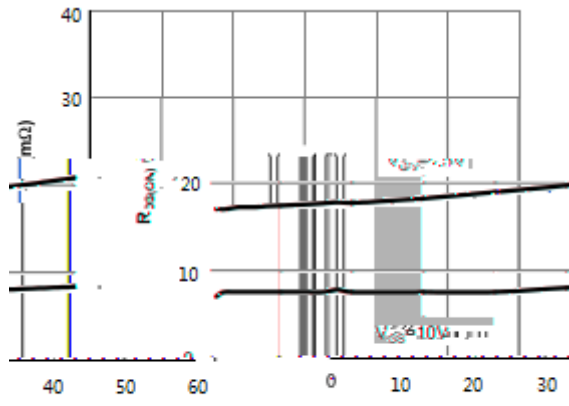


Figure 2: Transfer Characteristics



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

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

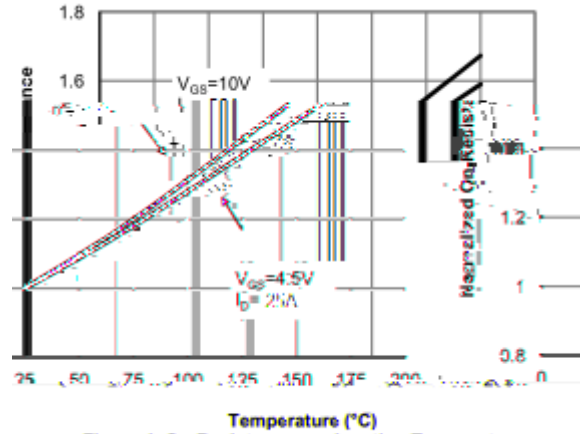


Figure 4: On-Resistance vs. Junction Temperature

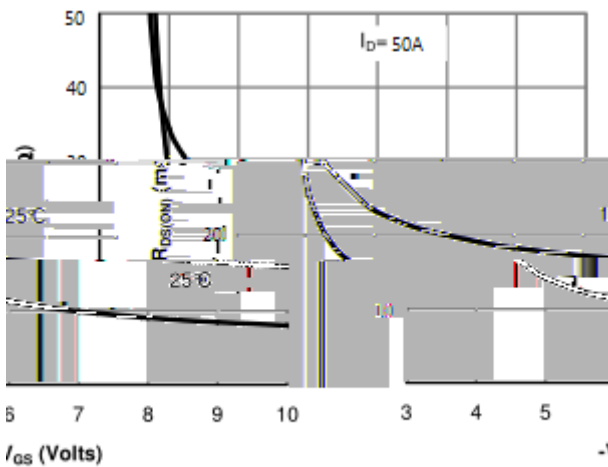


Figure 5: Body Diode Characteristics

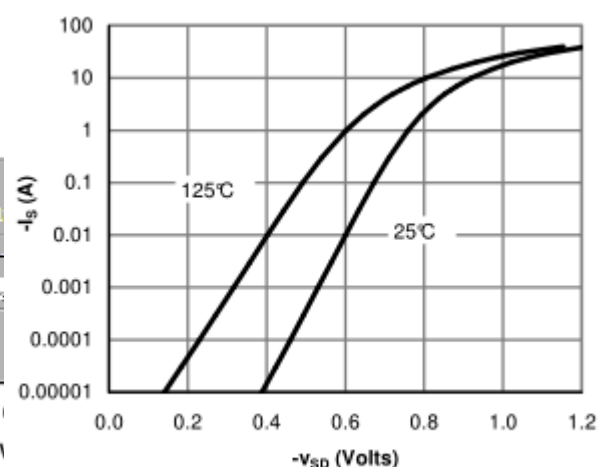
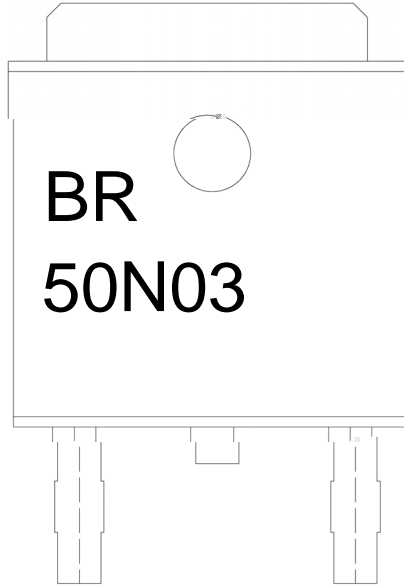


Figure 6: Body Diode Characteristics

/ Marking Instructions



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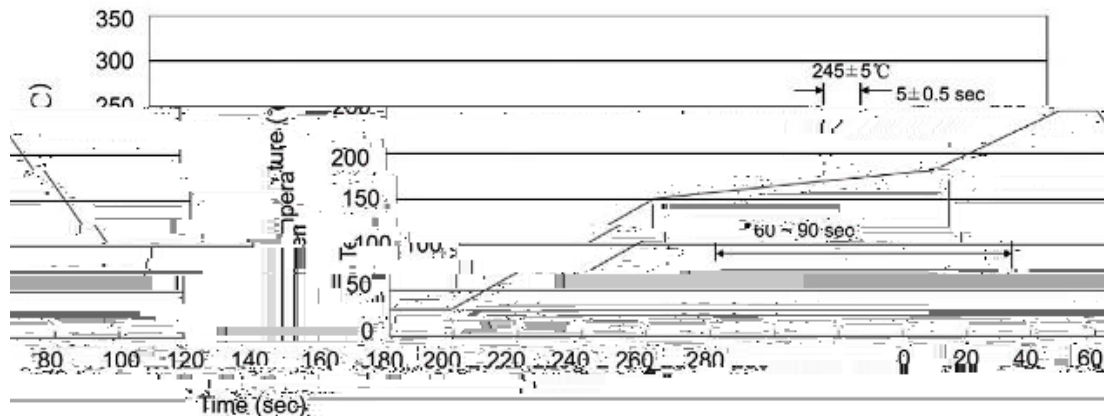
Note:

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. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		