# BRCS080N04ZB

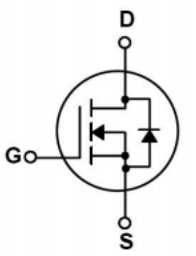
Rev.A May.-2022

**DATA SHEET**

N-Channel Enhancement Mode Field Effect Transistor in a DFN3 3A-8L Plastic Package.

$V_{DS}$ (V) = 40V
$I_D$ = 40A ($V_{GS}$ = ±20V)

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





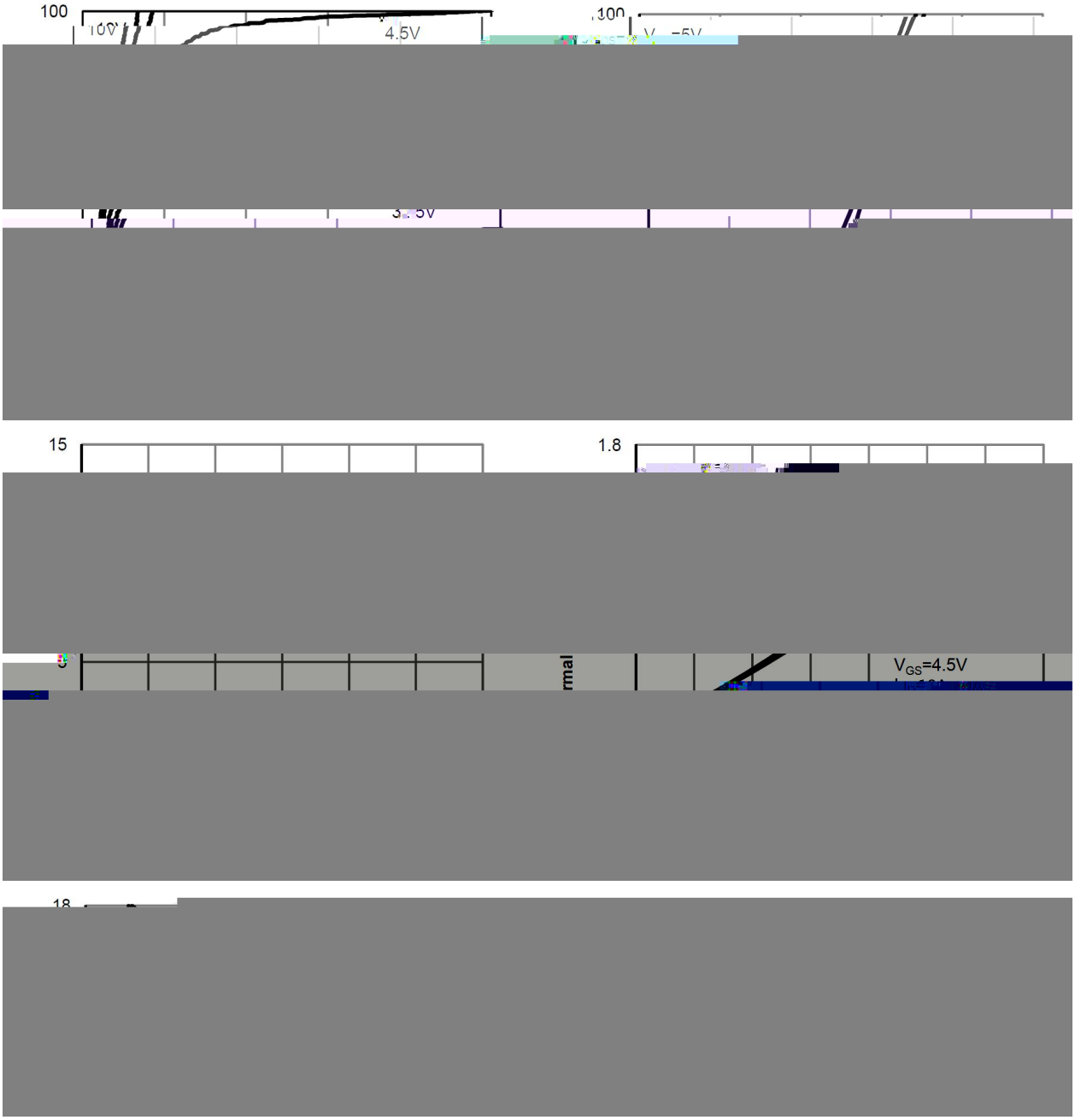

## / Marking

See Marking Instructions.

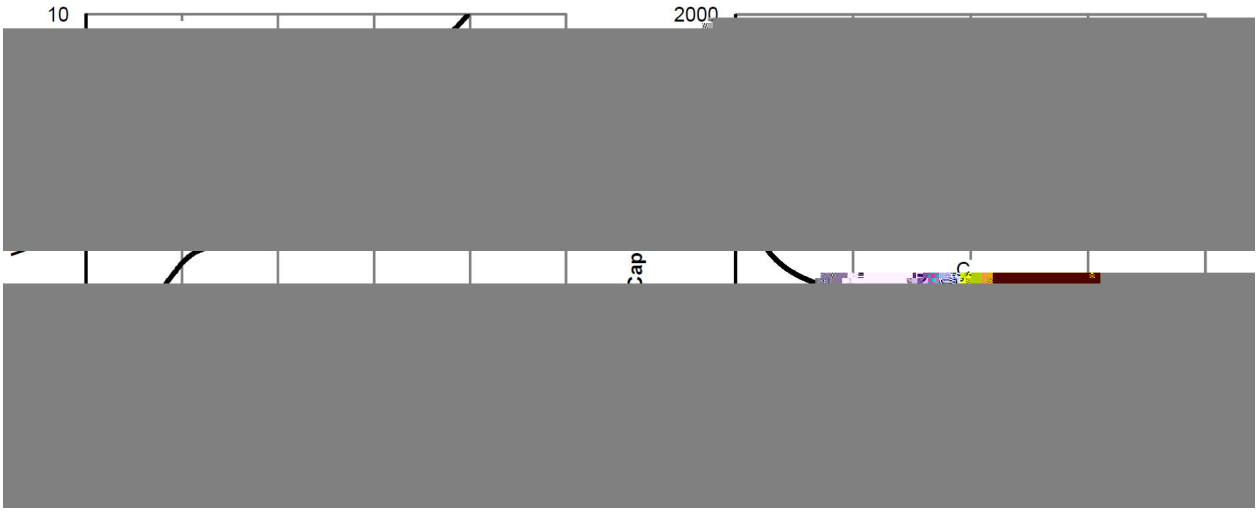
## / Electrical Characteristics(Ta=25 )

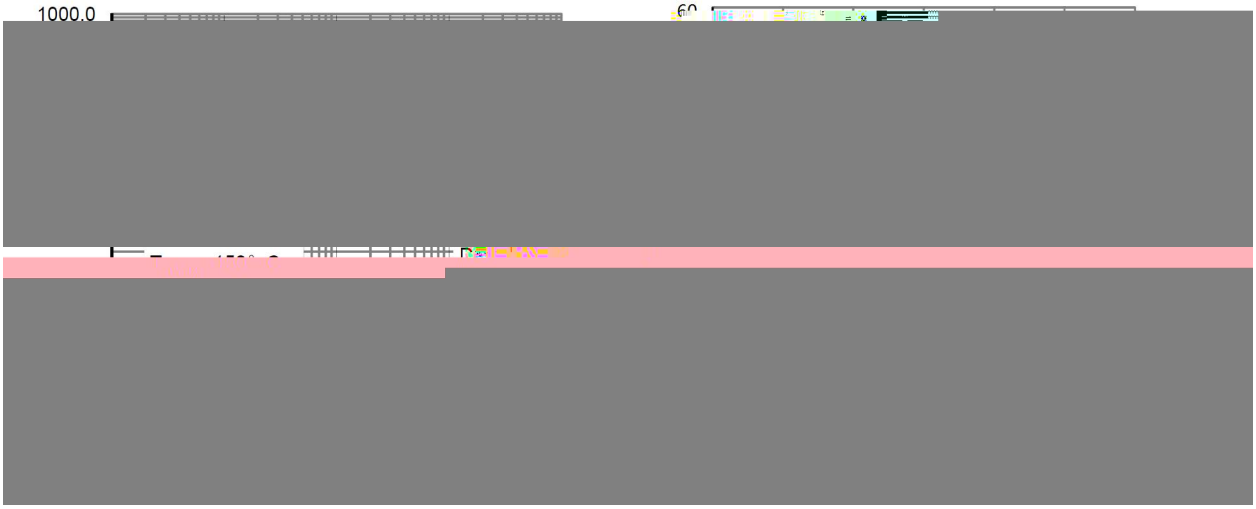
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Total Gate Charge | $Q_{g(10V)}$ | $V_{DS}$=20V $V_{GS}$=4.5V $I_D$=20A | | 20 | | nC |
| Total Gate Charge | $Q_{g(4.5V)}$ | | | 8.5 | | |
| Gate-Source Charge | $Q_{gs}$ | | | 5.5 | | |
| Gate-Drain Charge | $Q_{gd}$ | | | 3 | | |

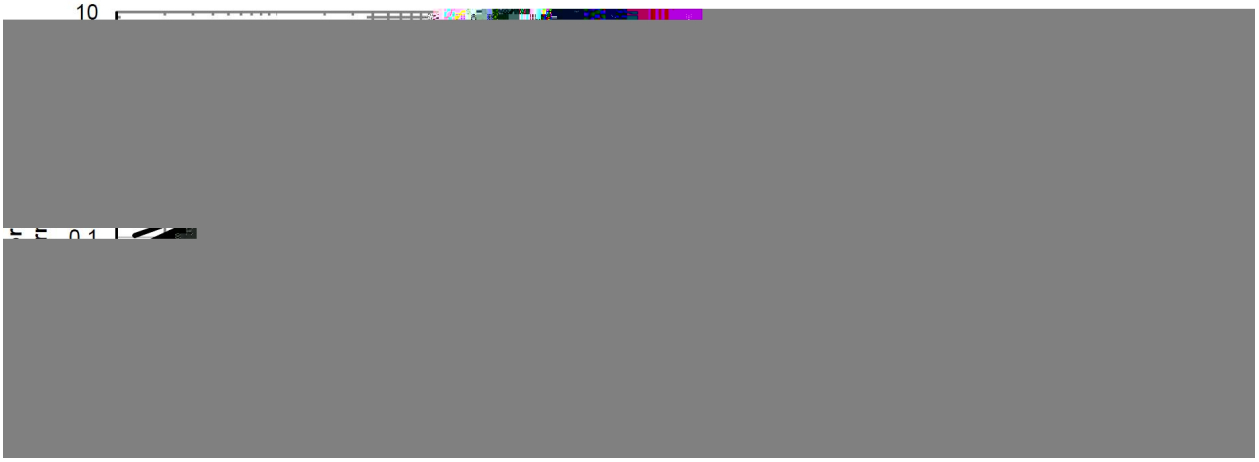
## / Electrical Characteristic Curve



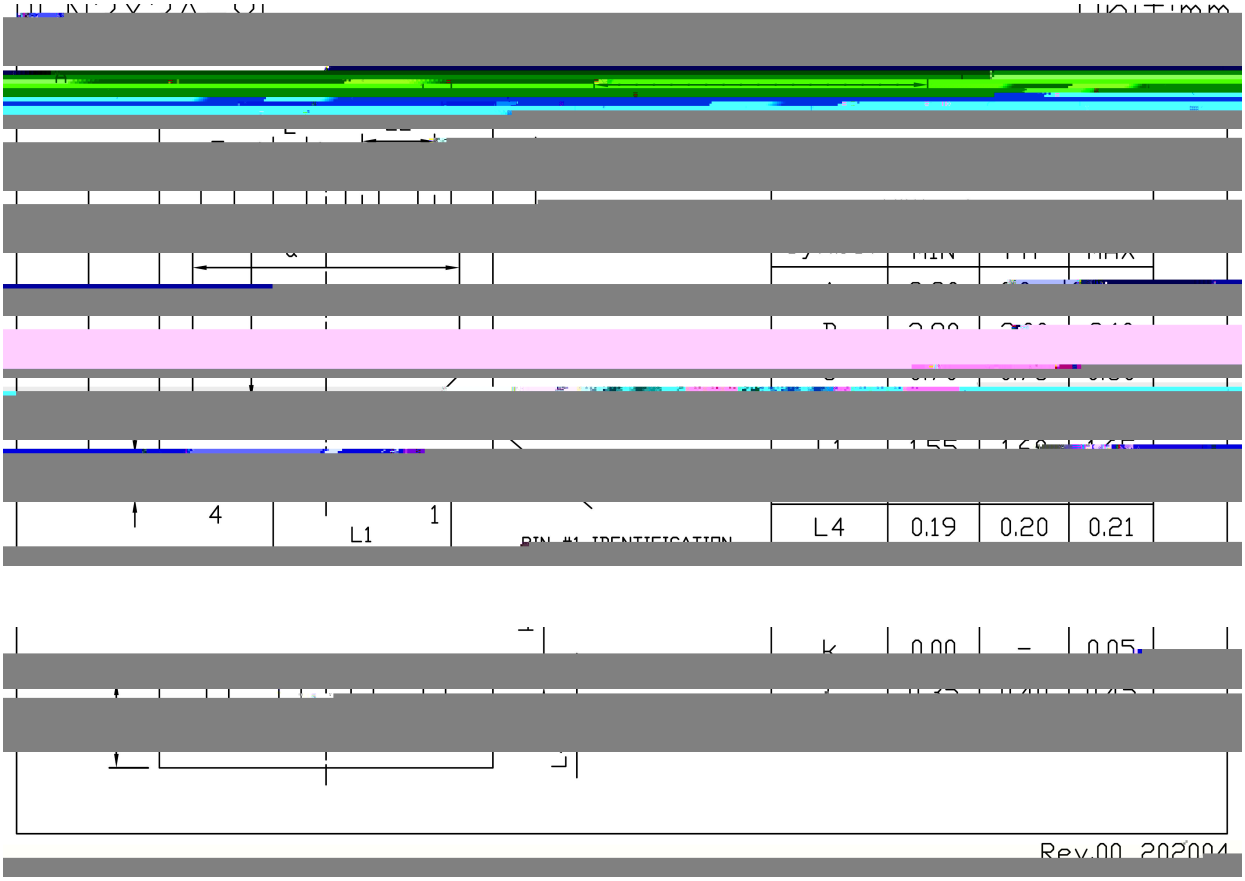
## / Electrical Characteristic Curve



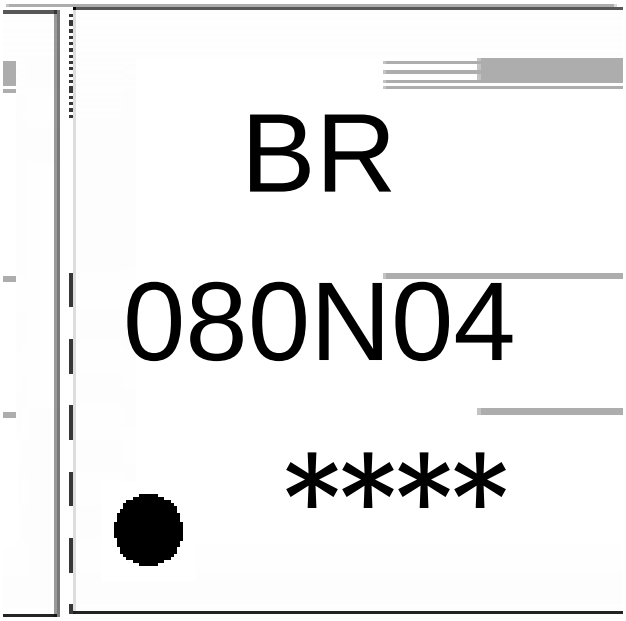



## / Package Dimensions



## / Marking Instructions




BR
080N04
****

Note:

| | |
|---|---|
| BR: | Company Code. |
| 080N04: | Product Type |
| ****: | 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 ' $mm^3$) |
|---|---|---|