

# BRCS040N03DP

Rev.A Dec. -2021

## / Descriptions

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

## / Features

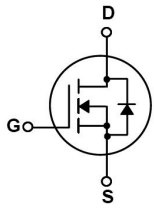
Low gate charge, low crss, fast switching, HF Product.

## / Applications

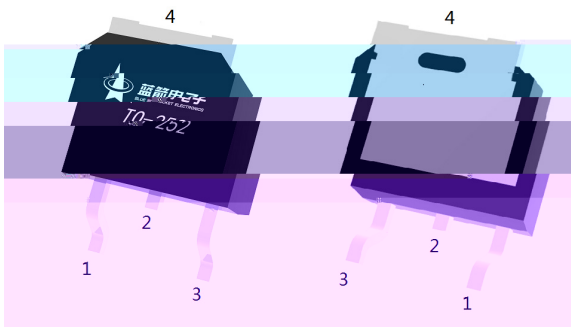
DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

## / Equivalent Circuit



## / Pinning



PIN1 G

PIN 2 D

PIN 3 S

PIN 4 D

## / Marking

See Marking Instructions.

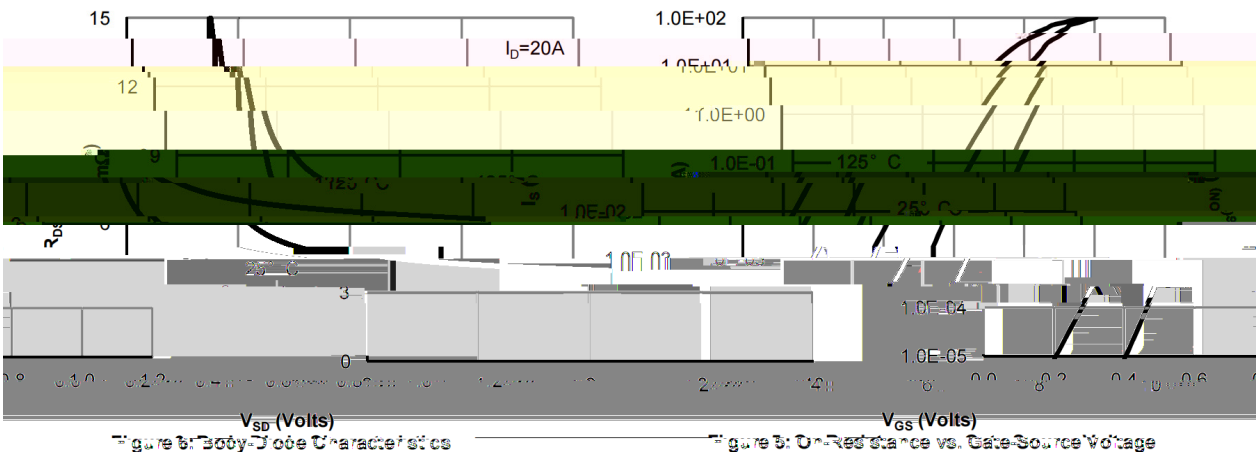
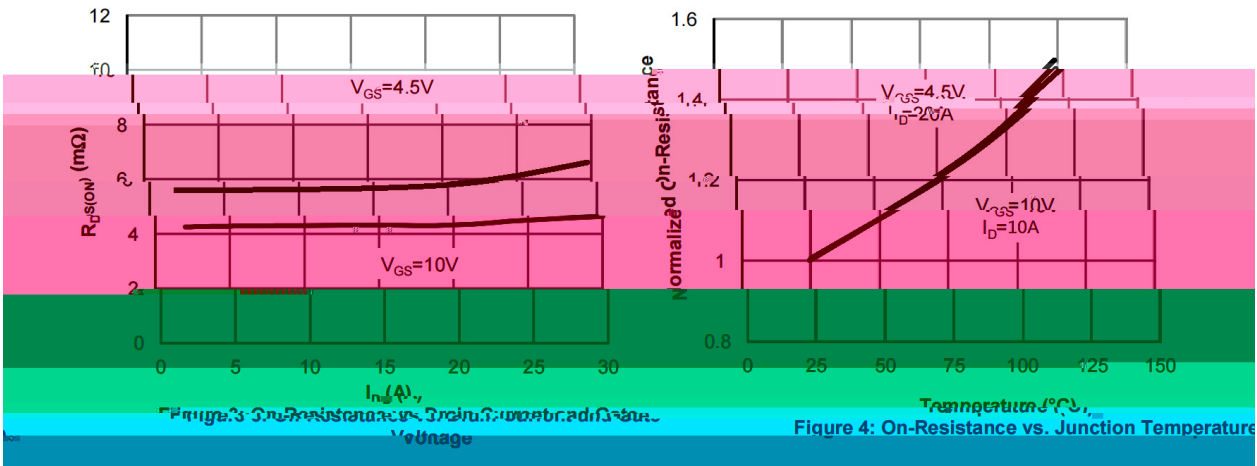
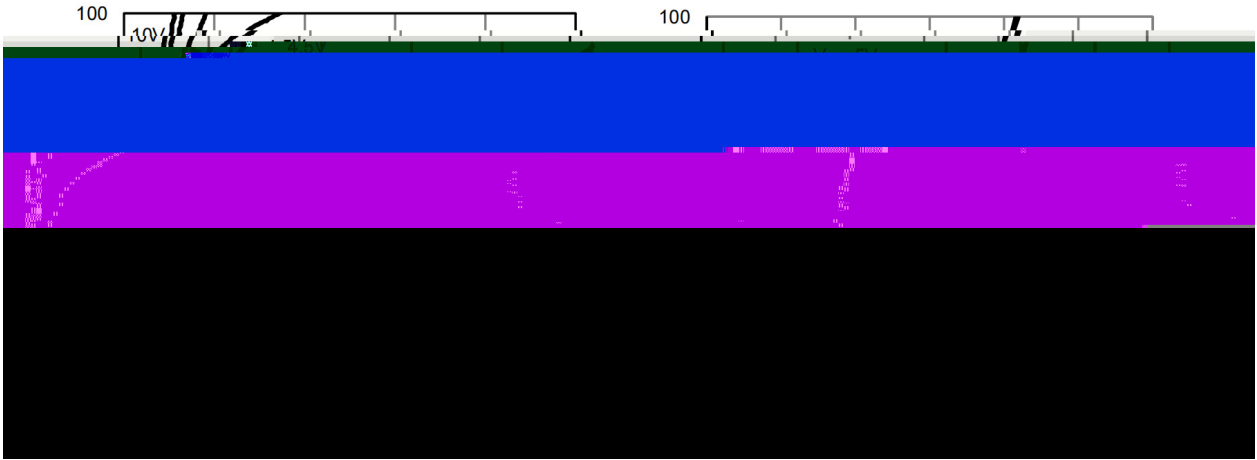
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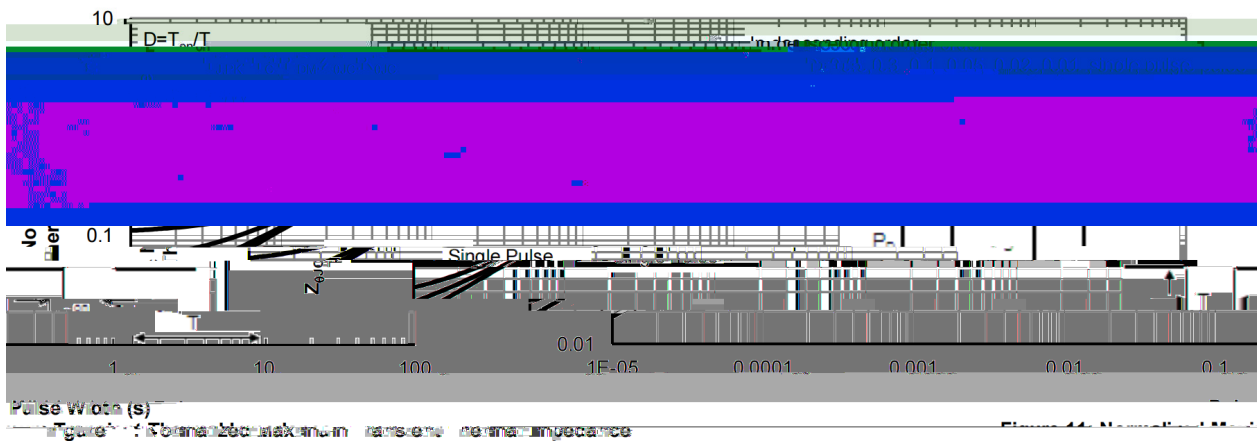
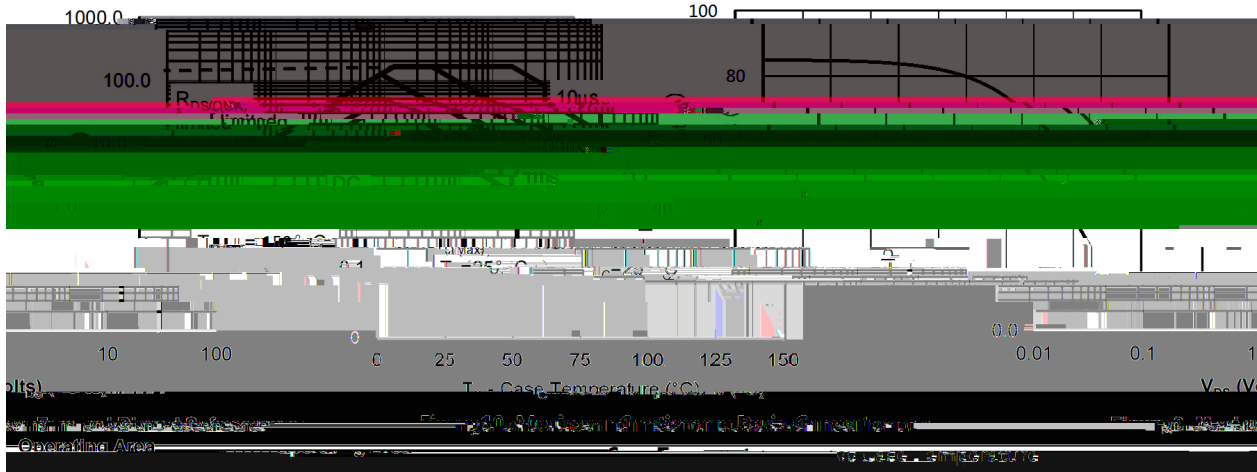
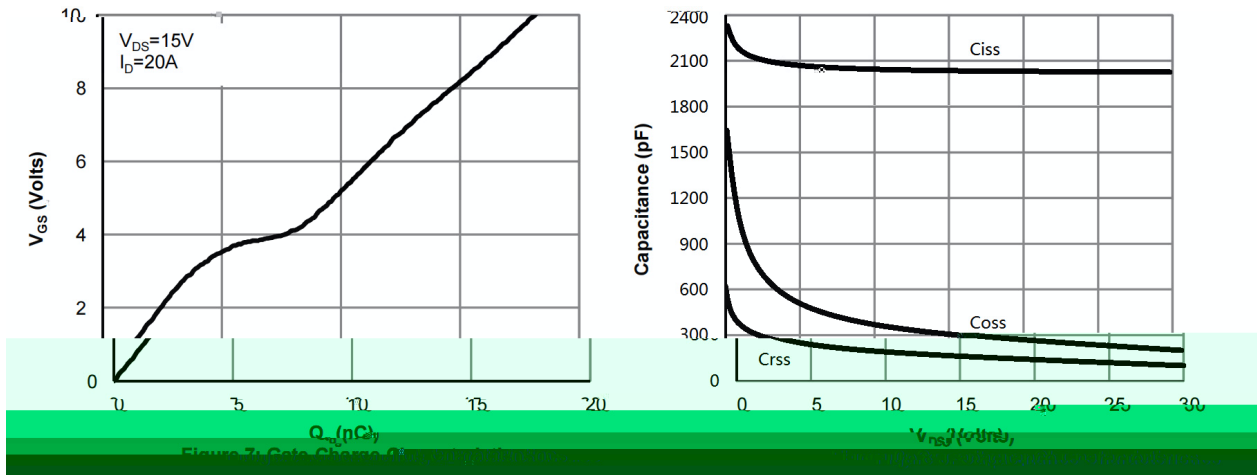
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	30	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	85	A
Peak Drain Current	$I_{DM}$	280	A
Gate-Source Voltage	$V_{GSS}$	20	V
Avalanche Current	$I_{AS}$	26	A
Single Pulsed Avalanche Energy	$E_{AS}$	354	mJ
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	100	W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150	
Thermal resistance, junction - ambient t = 10s	$R_{JA}$	20	



/ Electrical Characteristic Curve

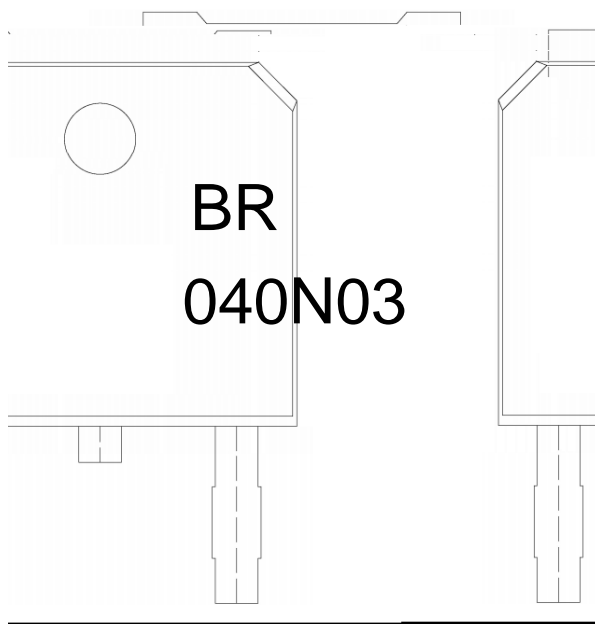


**/ Electrical Characteristic Curve**





**/ Marking Instructions**



BR

040N03

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Note:

BR: Company Code

040N03: 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
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**/ Packaging SPEC.**

**/ REEL**

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