

# BRCS040N03DP

Rev.A Dec. -2021

## / Descriptions

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

## / Features

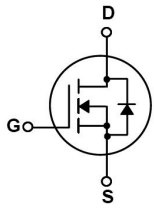
Low gate charge, low crss, fast switching, HF Product.

## / Applications

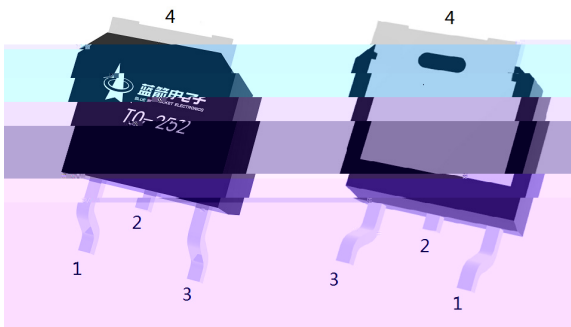
DC/DC

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.

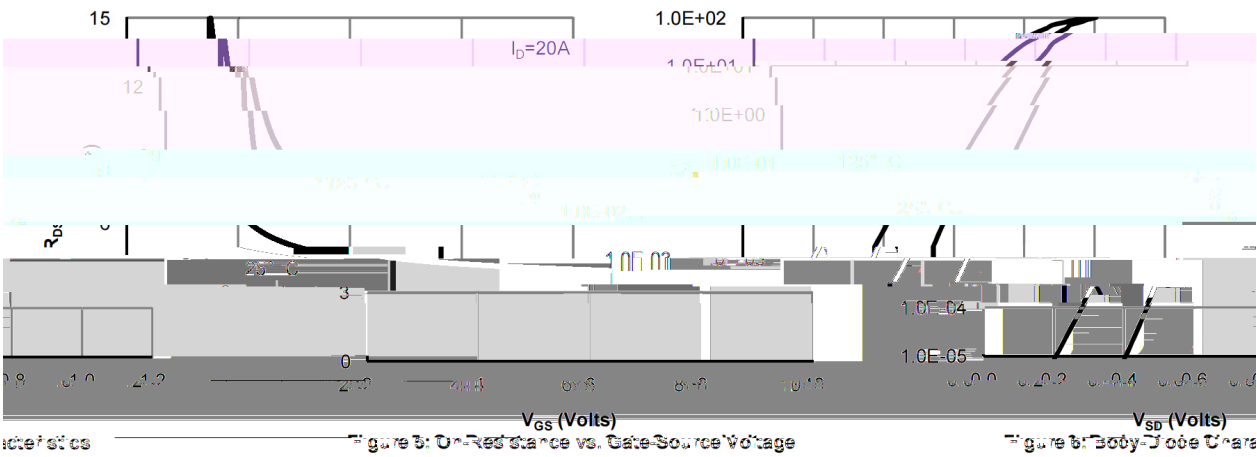
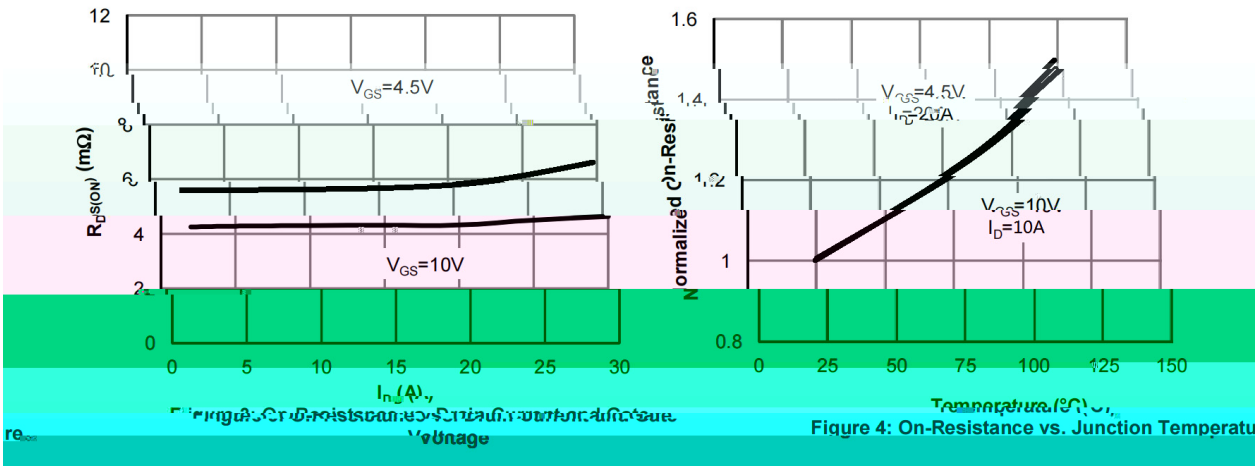
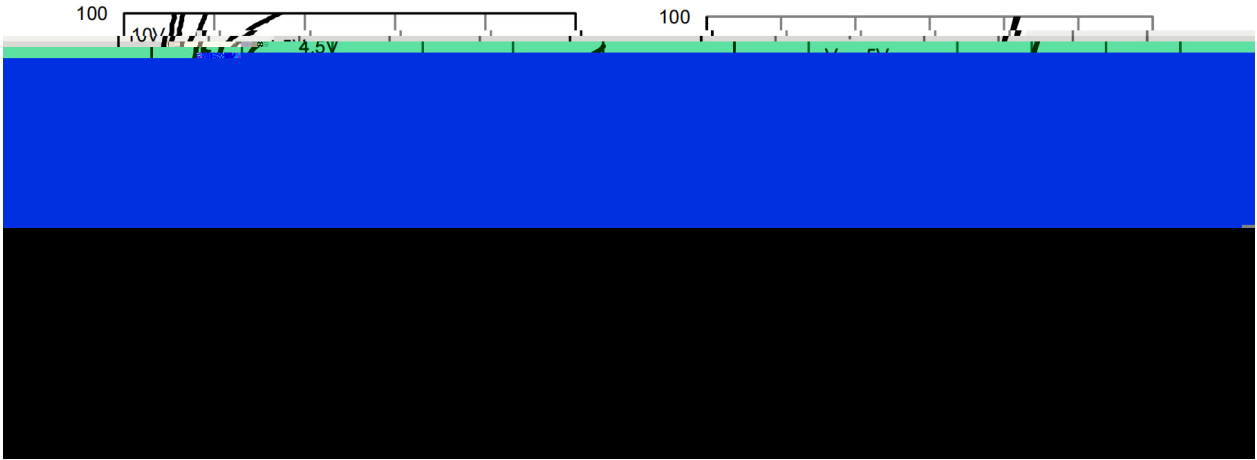
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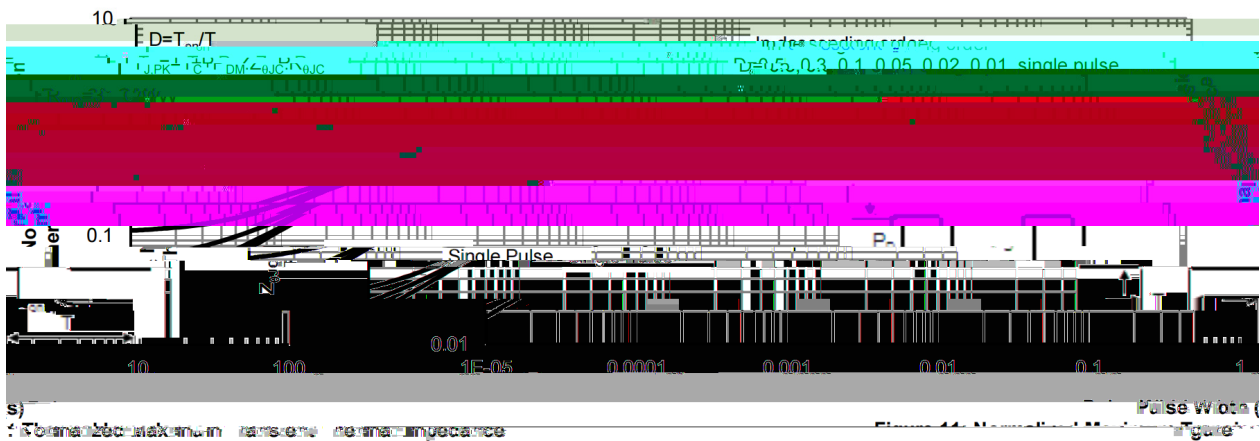
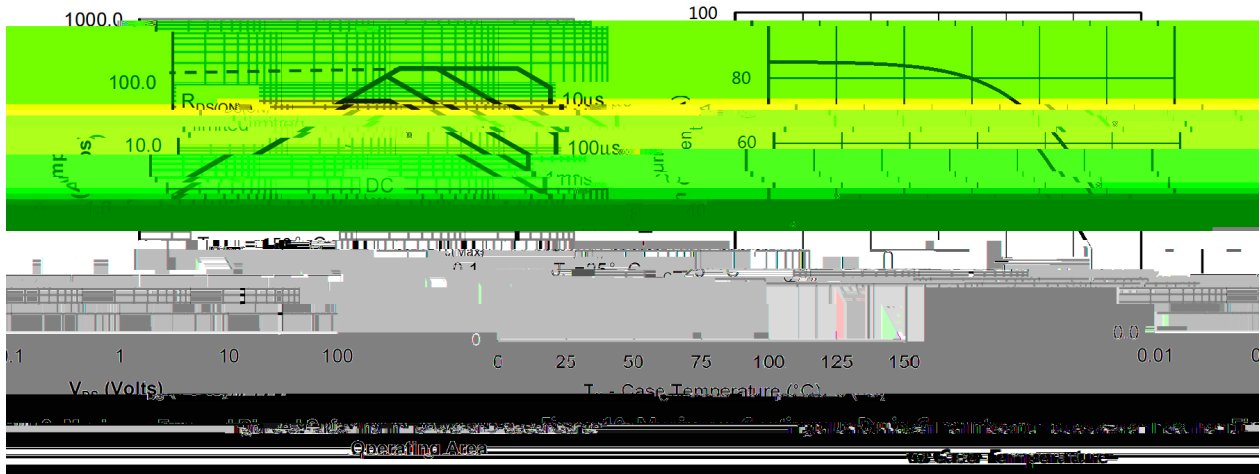
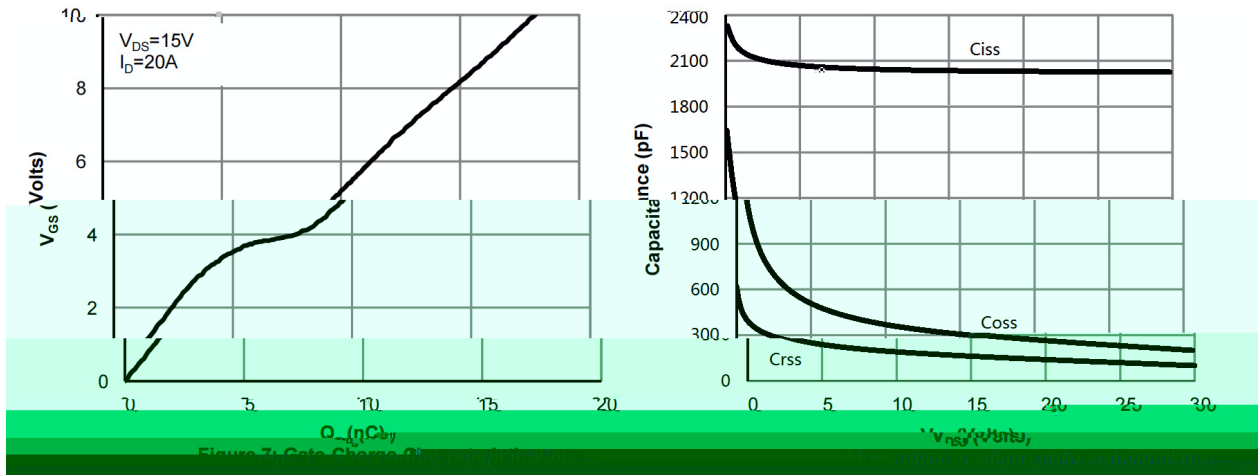
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	30	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	85	A
Peak Drain Current	$I_{DM}$	280	A
Gate-Source Voltage	$V_{GSS}$	20	V
Avalanche Current	$I_{AS}$	26	A
Single Pulsed Avalanche Energy	$E_{AS}$	354	mJ
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$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



/ Electrical Characteristic Curve

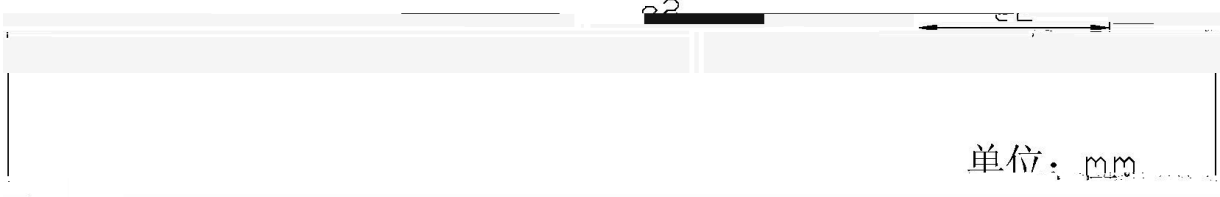
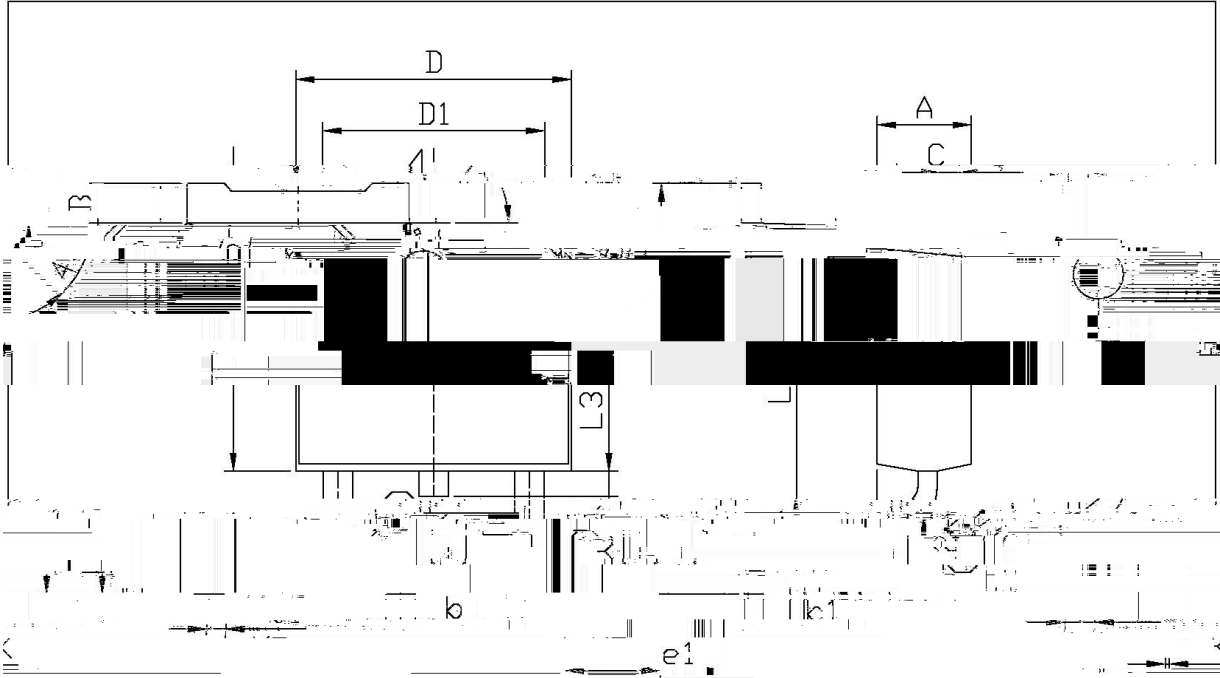


**/ Electrical Characteristic Curve**



/ Package Dimensions

**TO-252#**

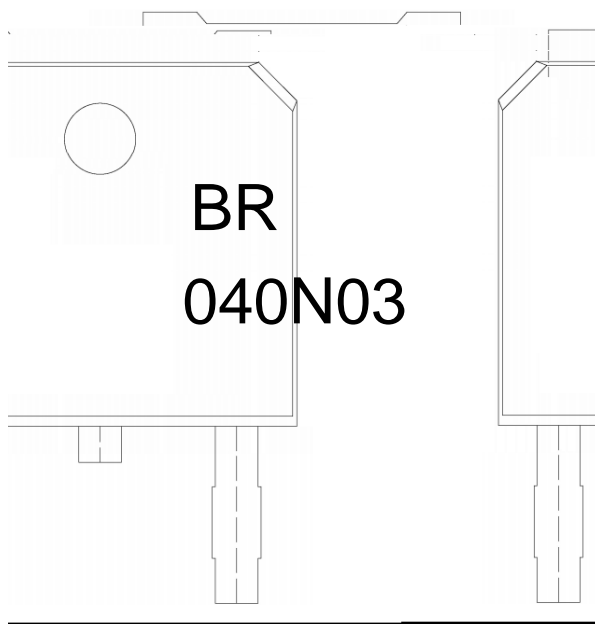


单位: mm

Dimensions		Millimeters		Dimensions		Millimeters	
Min	Max	Symbol	Value	Symbol	Value	Symbol	Value
0.95	1.25	e1	2.54	e2	2.54	B	0.45
0.30	0.68					A	0.45
0.55	0.85					C	0.45
0.60	0.80					D	6.45
0.60	0.80					D1	6.75
0.50	5.50	K	0.00		0.10		5.1

TO-252

**/ 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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