

BRCS040N03DP

Rev.A Dec. -2021

/ Descriptions

TO-252 N MOS

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

/ Features

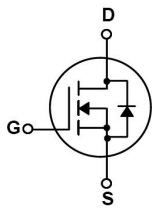
Low gate charge, low crss, fast switching, HF Product.

/ Applications

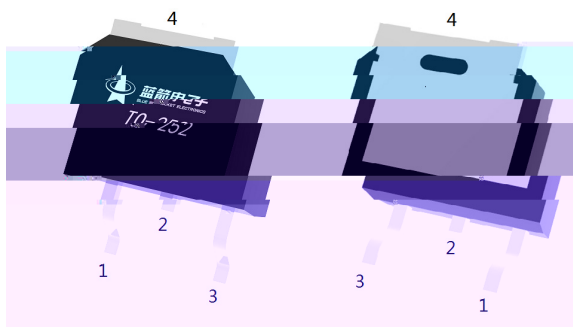
DC/DC

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.



Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Drain Current	$I_D(T_C=25^\circ C)$	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	$P_D(T_C=25^\circ C)$	100	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ C$

Thermal resistance, junction - ambient $t \leq 10s$

 $R_{\theta JA}$

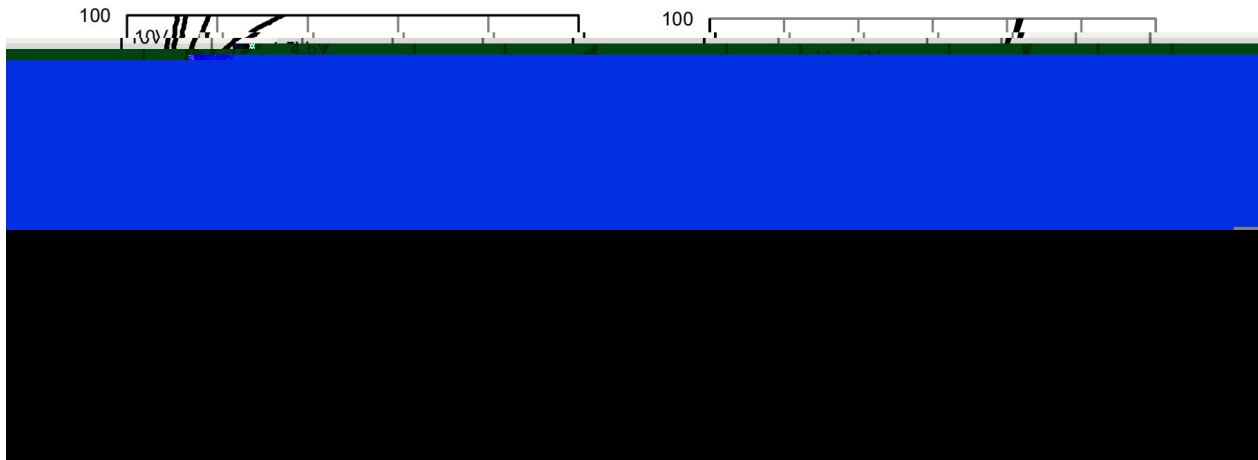
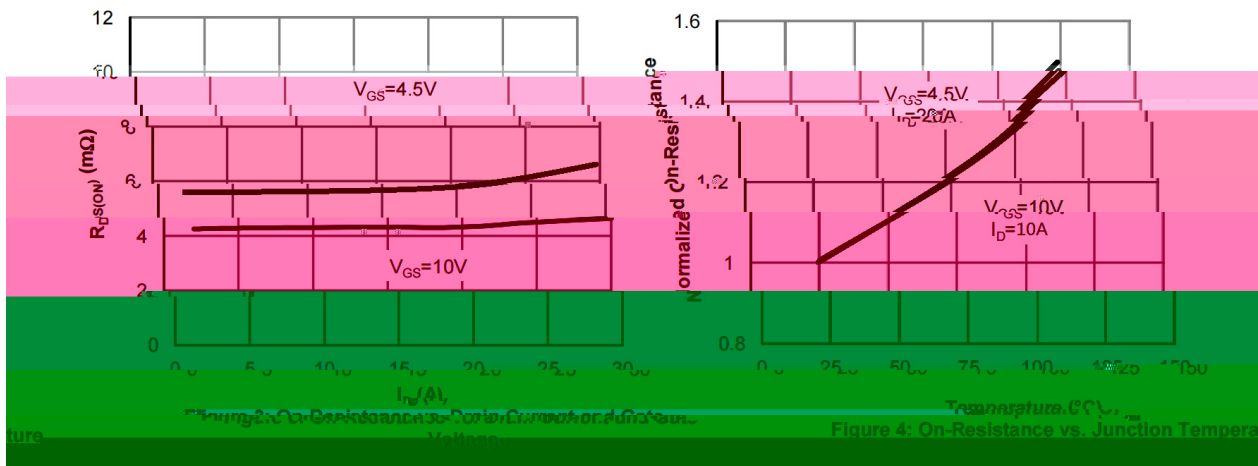
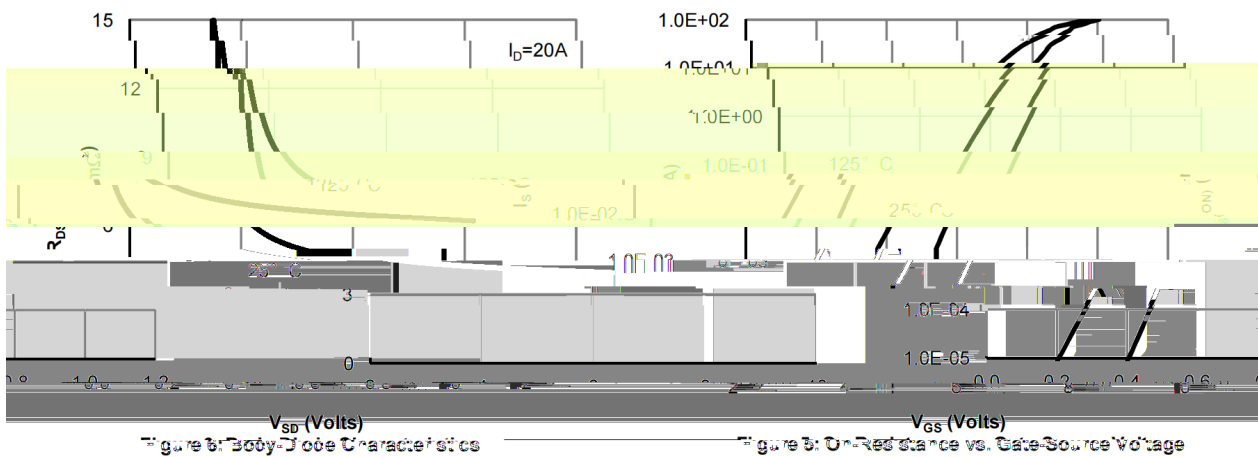
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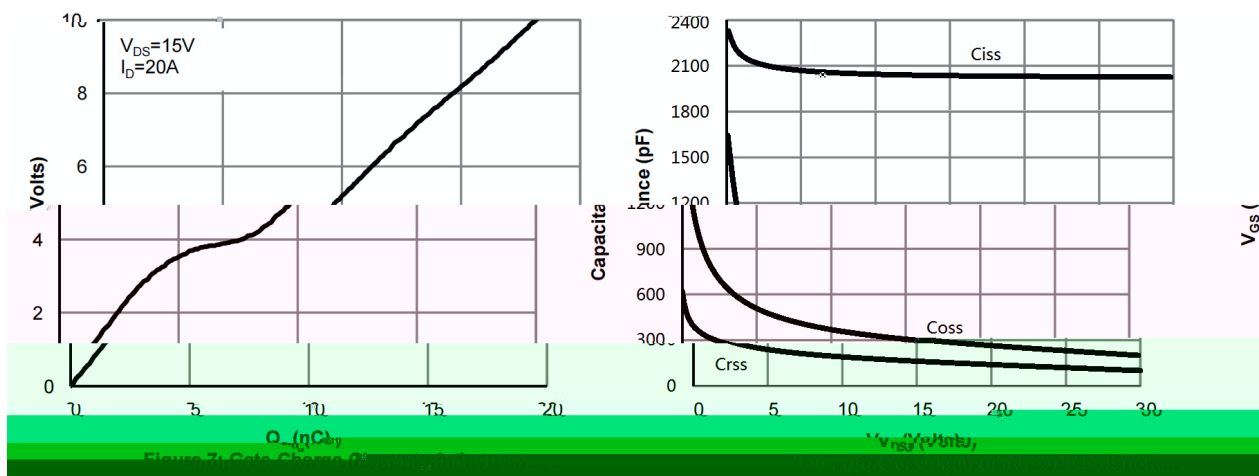
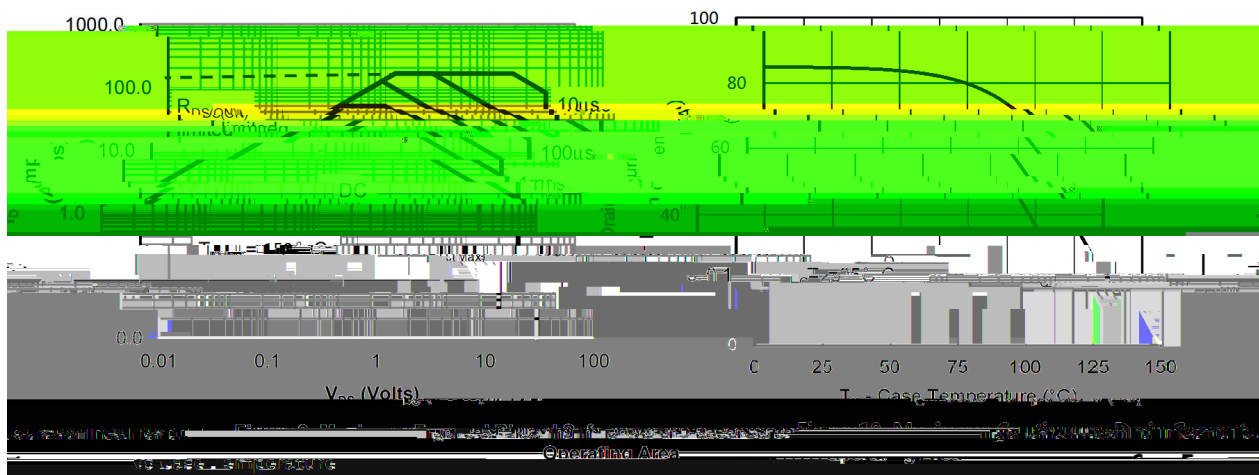
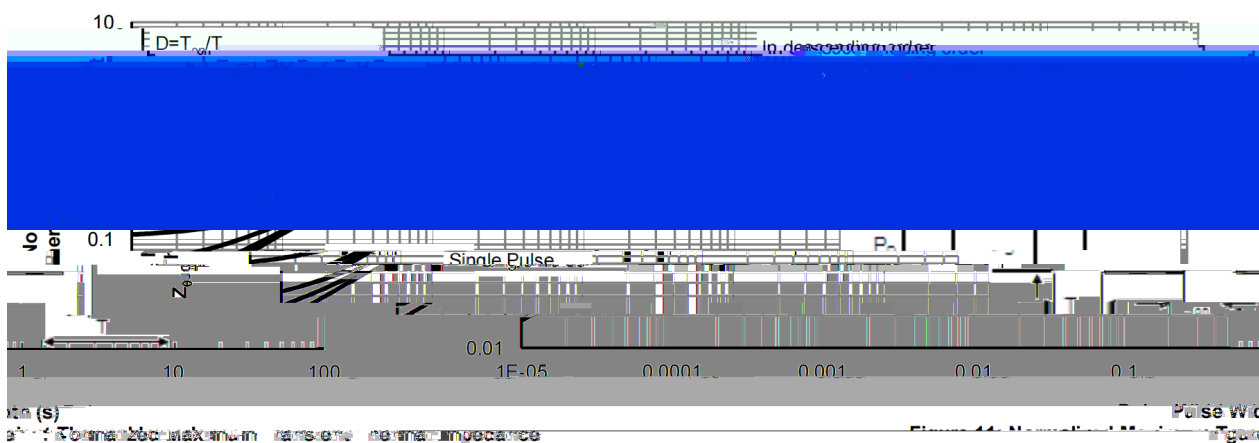
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Electrical Characteristic Curve

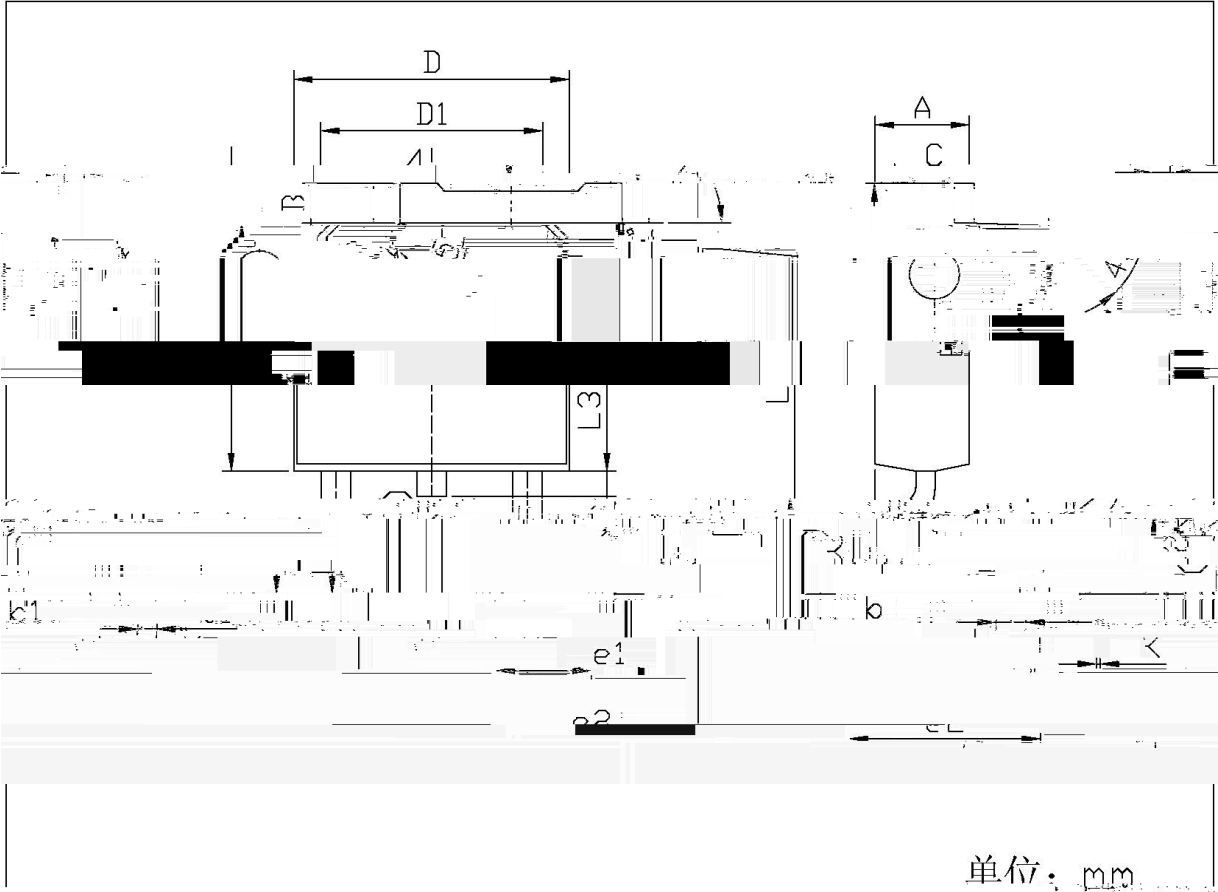


/ Electrical Characteristic Curve



/ Package Dimensions

TO-252#

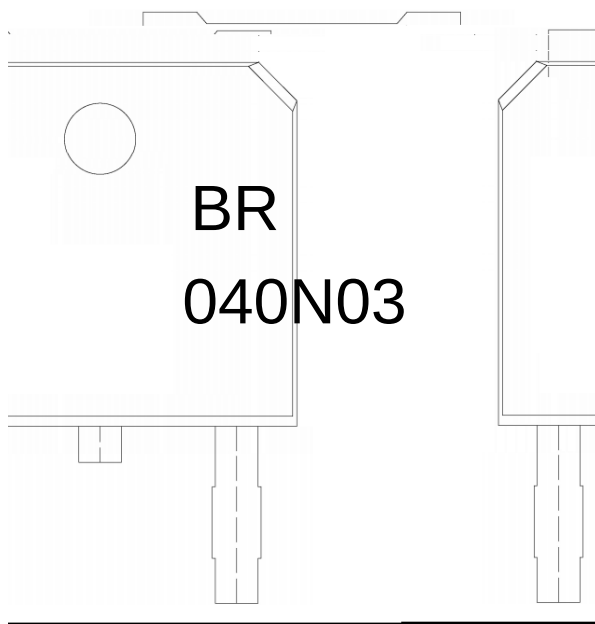


Dimensions, Millimeters		Symbol		Dimensions, Millimeters		Symbol	
Min	Max	Min	Max	Min	Max	Min	Max
2.34	2.54	B#	0.95	1.25	e1	2.24	2.54
4.72	5.08	b1	0.45	0.55	e2	0.85	1.03
0.40	0.50	D	6.45	6.75	L	5.10	5.50
0.10	0.15	D1	5.10	5.50	K	0.60	0.80

TO-252



/ Marking Instructions



BR

040N03

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 ³)
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