

BRCS030N10SHBD

Rev.A Sep.-2022

/ Descriptions

TO-263 N

N-CHANNEL MOSFET in a TO-263 Plastic Package.

/ Features

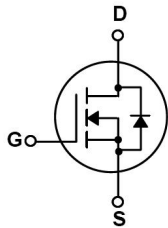
Ultra Low On-Resistance,fast switching,HF Product.

/ Applications

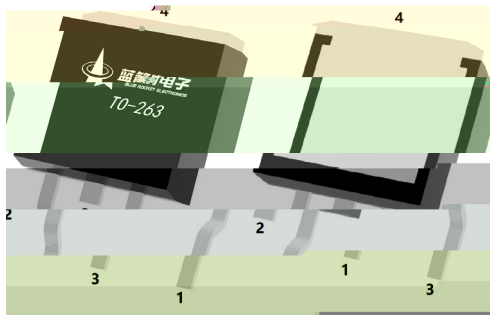
BMS

High frequency switching and synchronous rectification,BMS,Motor.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 4 D PIN 3 S

/ Marking

See Marking Instructions.

BRCS030N10SHBD

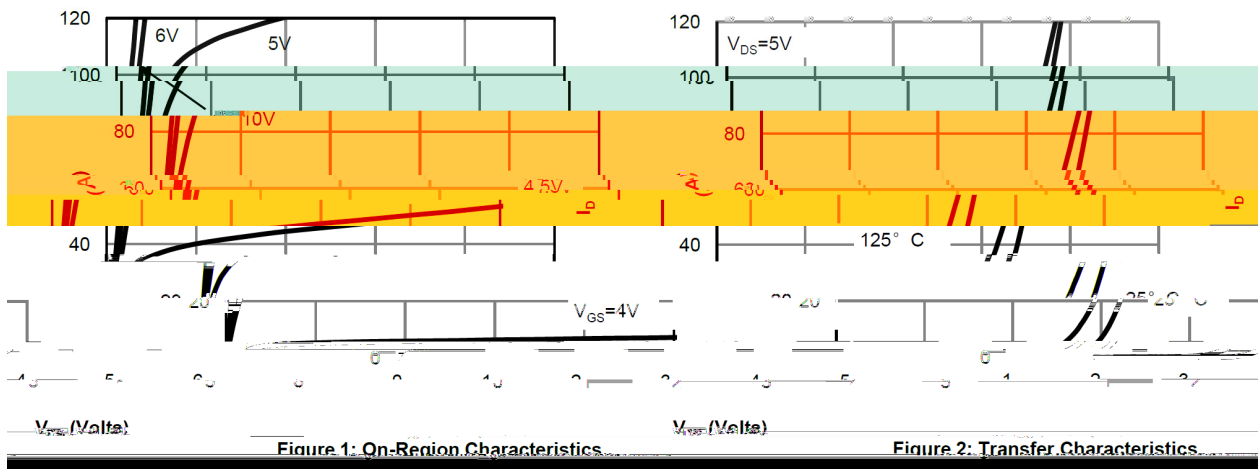
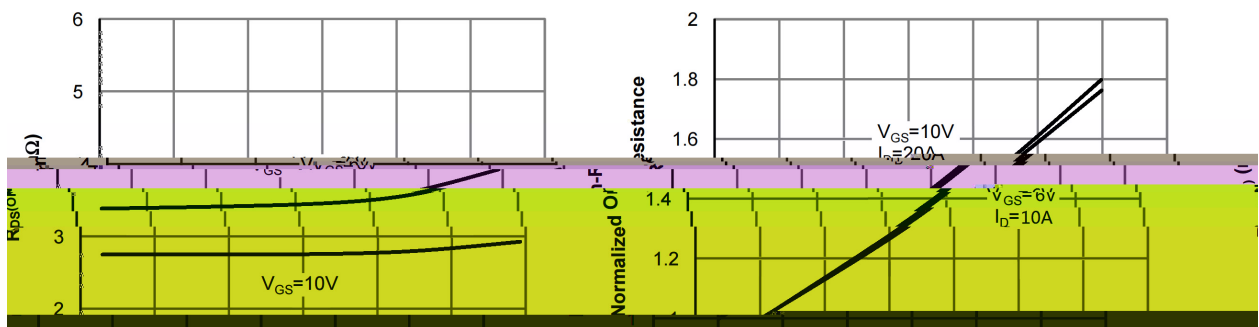
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Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	100	V
Drain Current		$I_D(T_c=25^\circ\text{C})$	212	A
Pulsed Drain Current		I_{DM}	445	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	1000	mJ
Avalanche Current		I_{AS}	50	A
Total Power Dissipation		$P_D(T_c=25^\circ\text{C})$	260	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	$t \leq 10\text{s}$	R_{JA}	13	/W
	Steady-State		58	
Thermal Resistance-Junction to Case	Steady-State	R_{JC}	0.48	

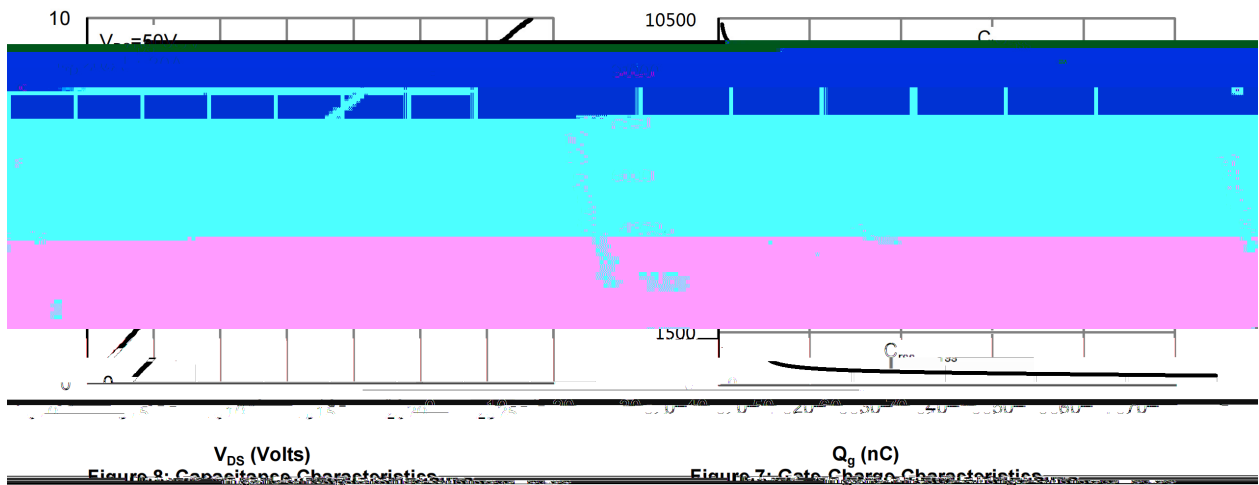
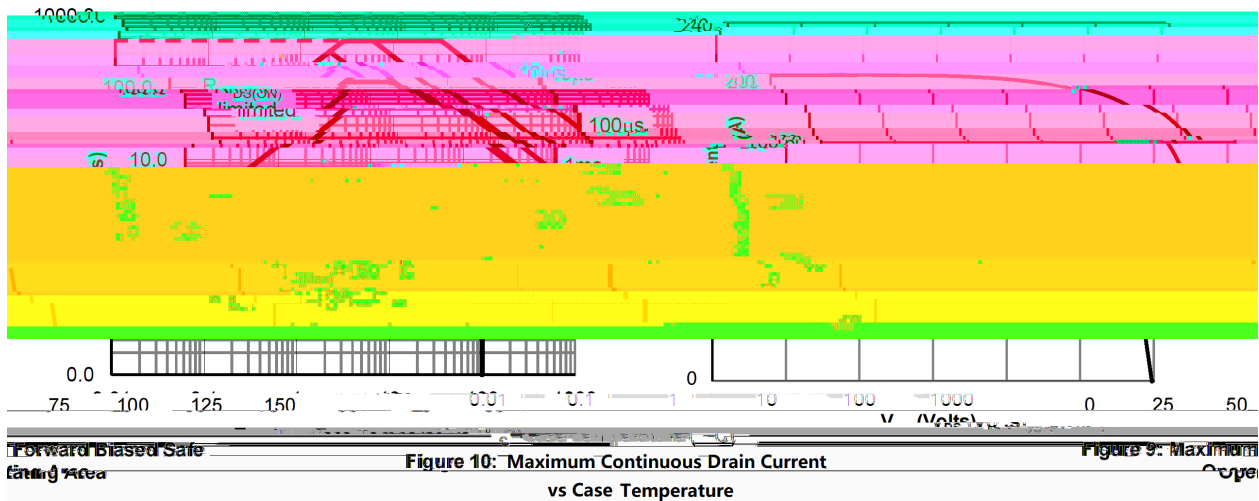
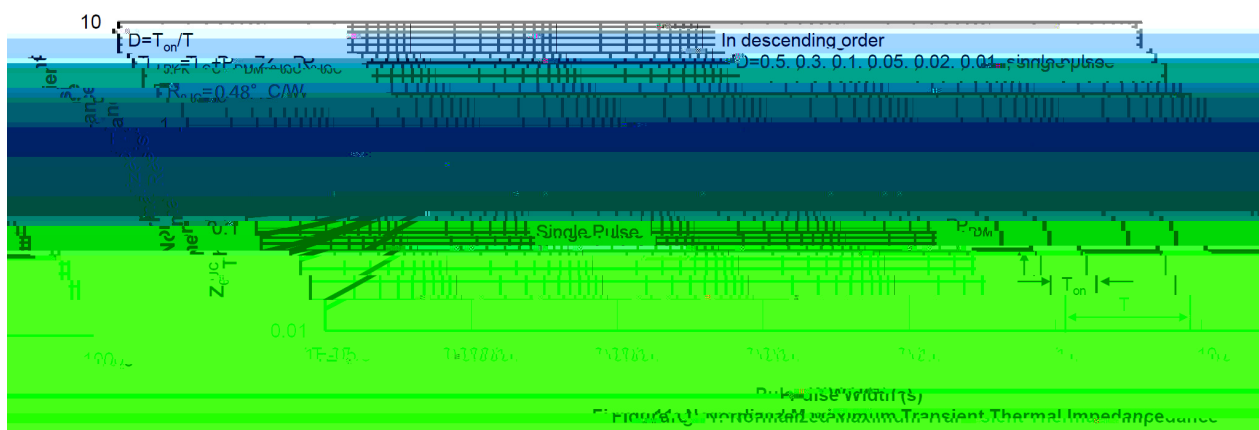
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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Parameter	5055a7f2.8790aa107da045eTD0 Tc()Tj22 166 -1.3886 TD-.00057 TP
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/ Electrical Characteristic Curve



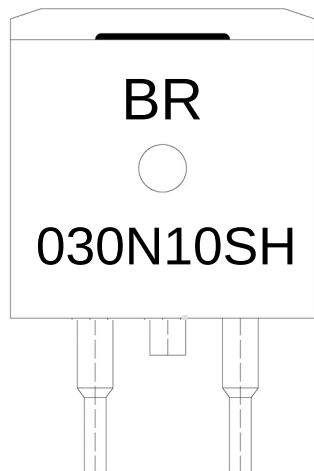
/ Electrical Characteristic Curve



BRCS030N10SHBD

Rev.A Sep. 6 (.) 220 - N1.9(2(p)220)21824.2(p)222(p)22

/ Marking Instructions



BR

030N10SH

Note:

BR: Company Code

030N10SH: Product Type

****: Lot No. Code, code change with Lot No

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

- Note:

1

150 180

60 90sec;

2

245±5

5±0.5sec;

3

2 10

/sec.

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

605±5