

BRCS055N10SHBD

Rev.B Dec.-2023

/ Descriptions

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

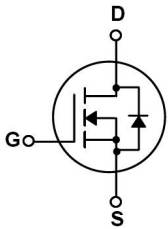
/ Features

$V_{DS}=100V$ $I_D=120A$
 $R_{DS(on)}@10V$ 5.5m (Type.4.7m)
 $R_{DS(on)}@4.5V$ 7.0m (Type.6.0m)
HF Product.

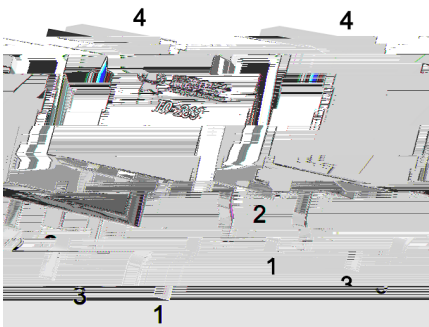
/ Applications

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.

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DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	100	V
Drain Current	$I_D(T_c=25^\circ C)$	120	A
Pulsed Drain Current	I_{DM}	255	A
Gate-Source Voltage	V_{GS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)	E_{AS}	883.6	mJ
Avalanche Current	I_{AS}		

BRC5055N10SHBD

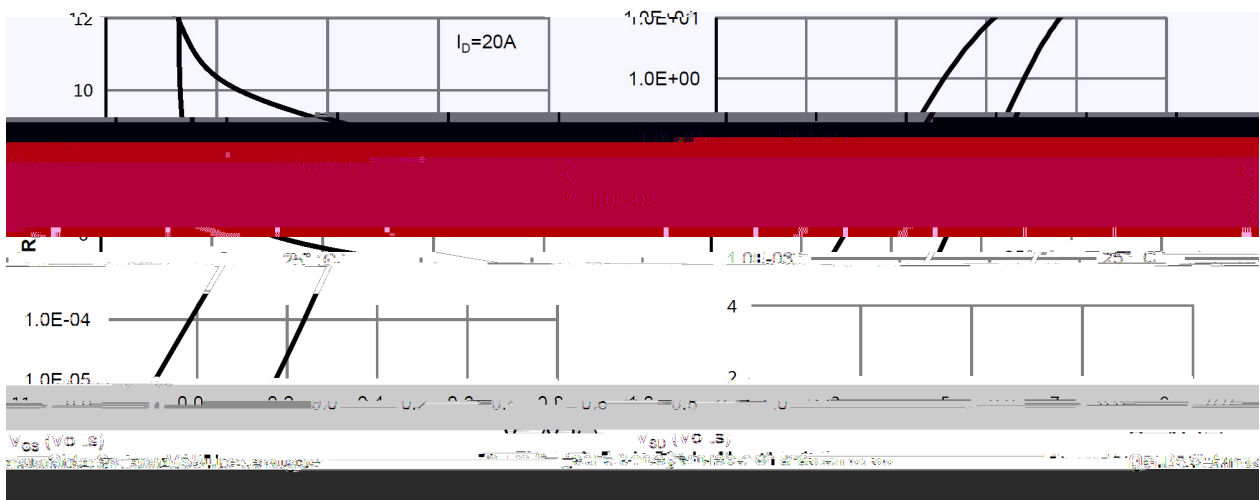
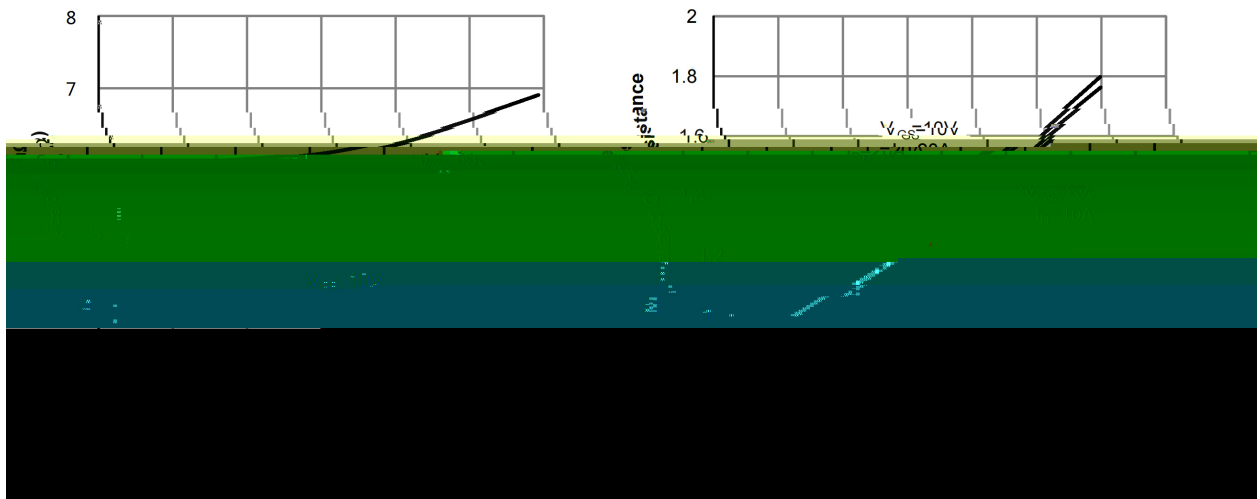
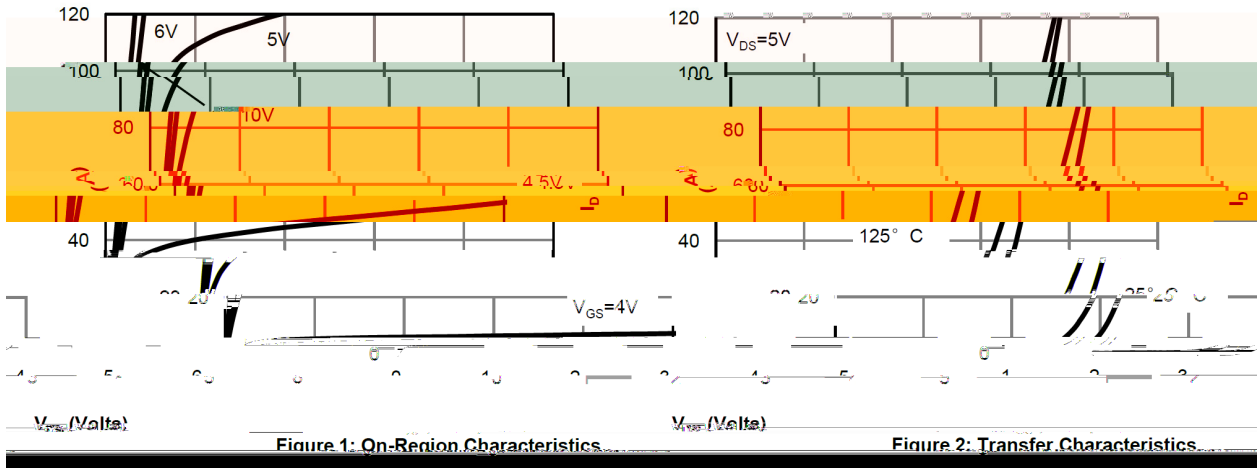
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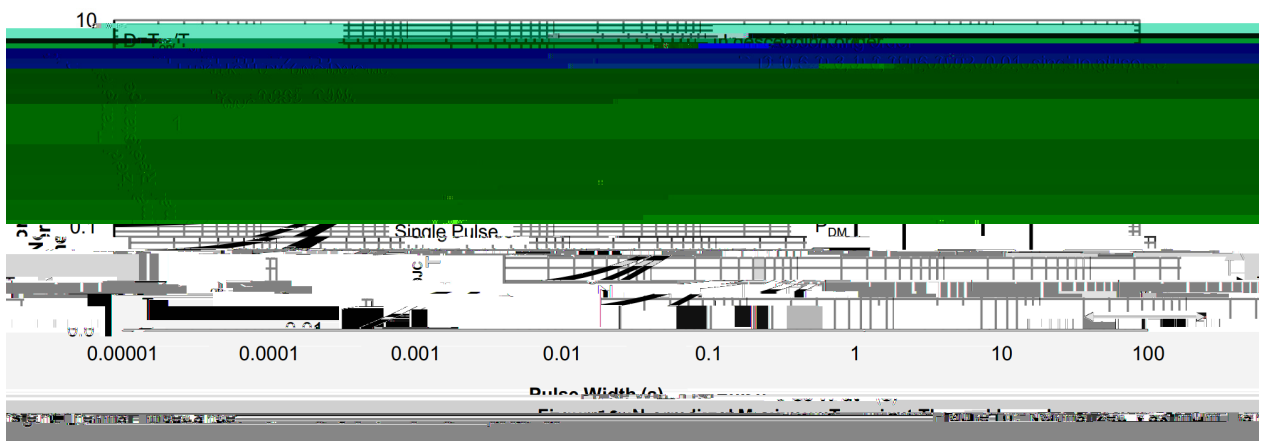
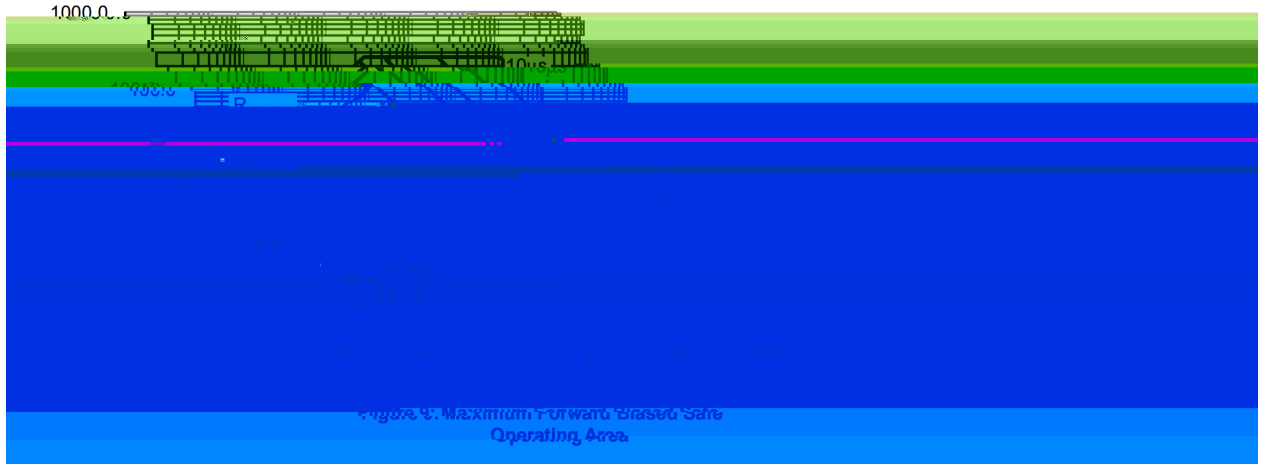
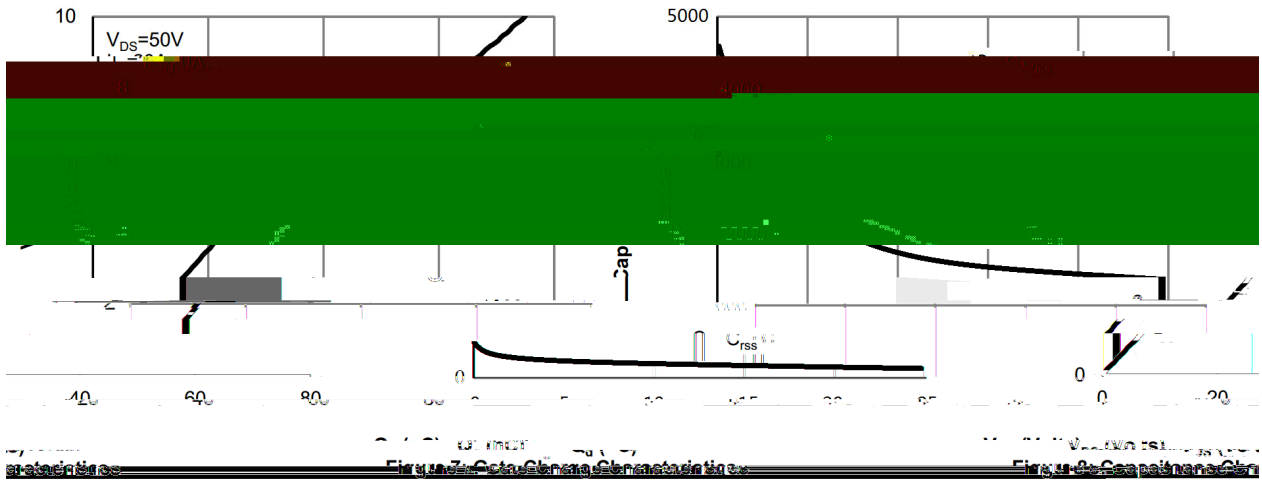
DATA SHEET

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$			28.3		
Turn-On Rise Time	t_r	$V_{GS}=10V$ $R_L=2.5$ $V_{DS}=50V$ $R_{GEN}=3$		24		ns

/ Electrical Characteristic Curve



/ Electrical Characteristic Curve

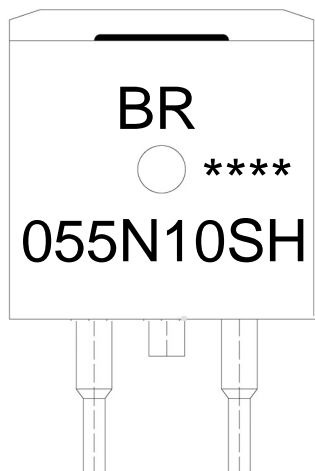


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DATA SHEET

/ Marking Instructions



BR

055N10SH

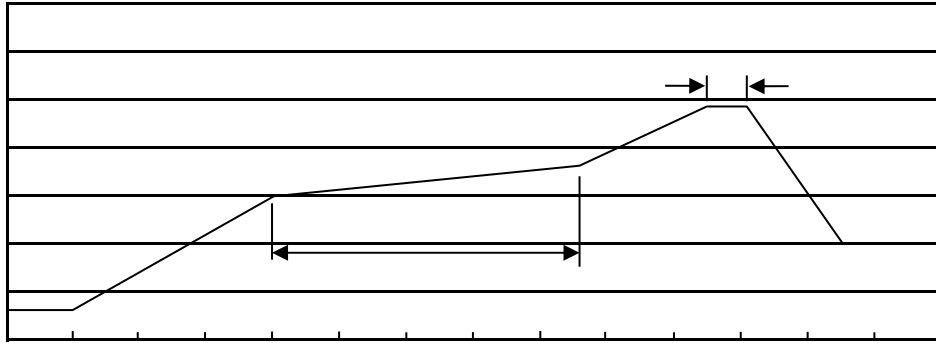
Note:

BR: Company Code

055N10SH: Product Type Code

****: 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)		
TO-263	800	1	800	6	4,800	13 x24	360x360x50	380x335x366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
TO-263	50	20	1,000	5	5,000	532x33x7.0	555x164x50	575x290x180

/ Notices