

BRCs035N10SHBDQ

Rev.A Dec.-2023

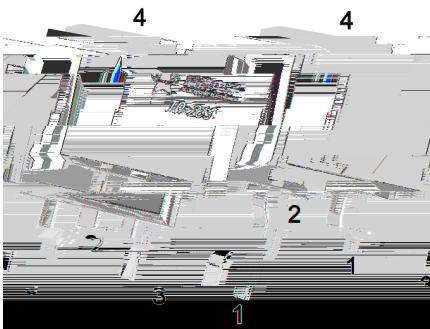
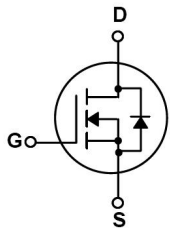
TO-263 N

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

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High frequency switching and synchronous rectification,BMS, Motor, Meet the stringent requirements of automotive applications.



PIN1 G PIN 2 4 D PIN 3 S

See Marking Instructions.

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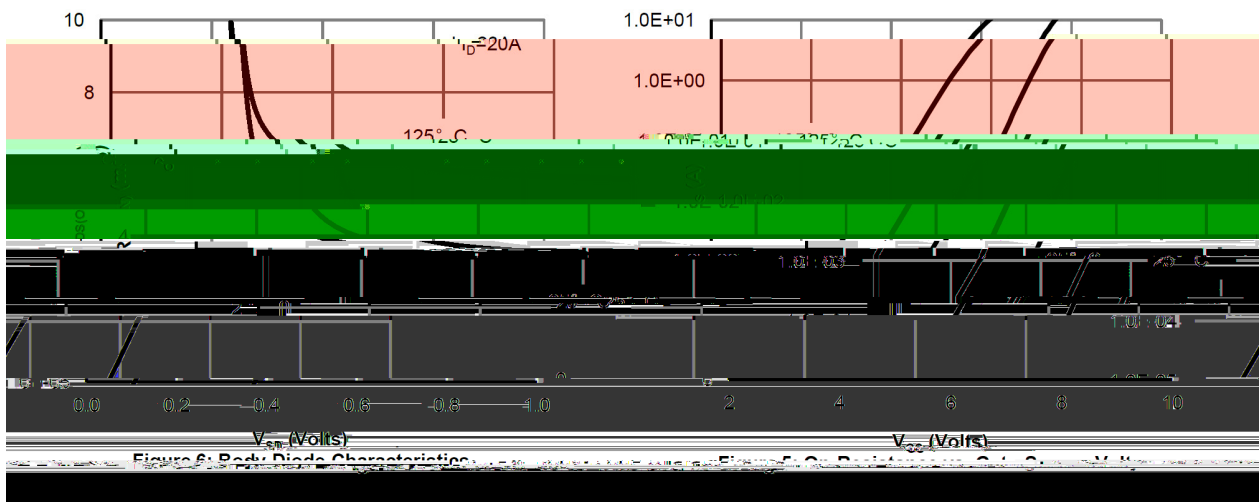
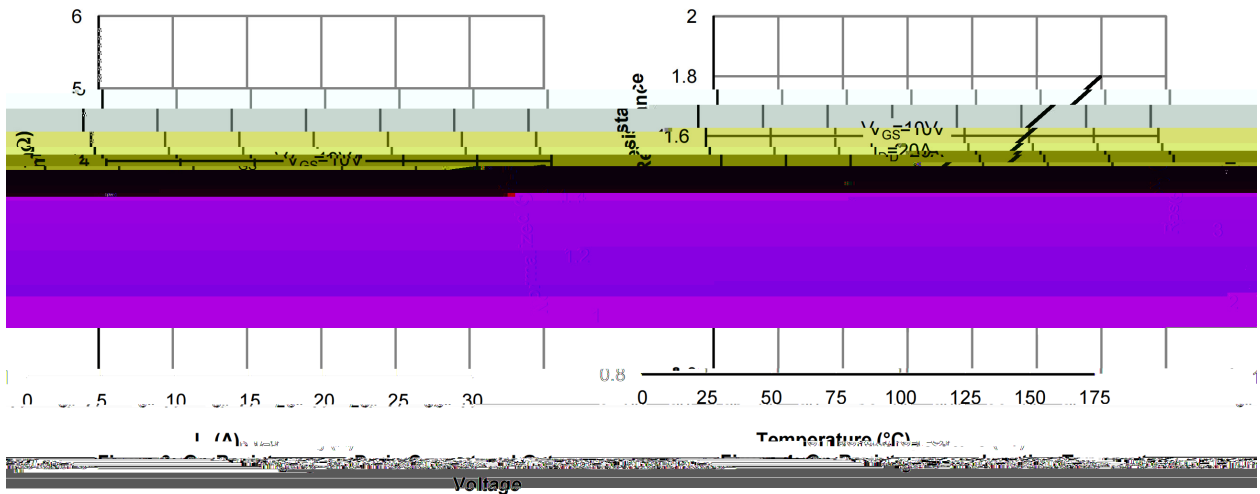
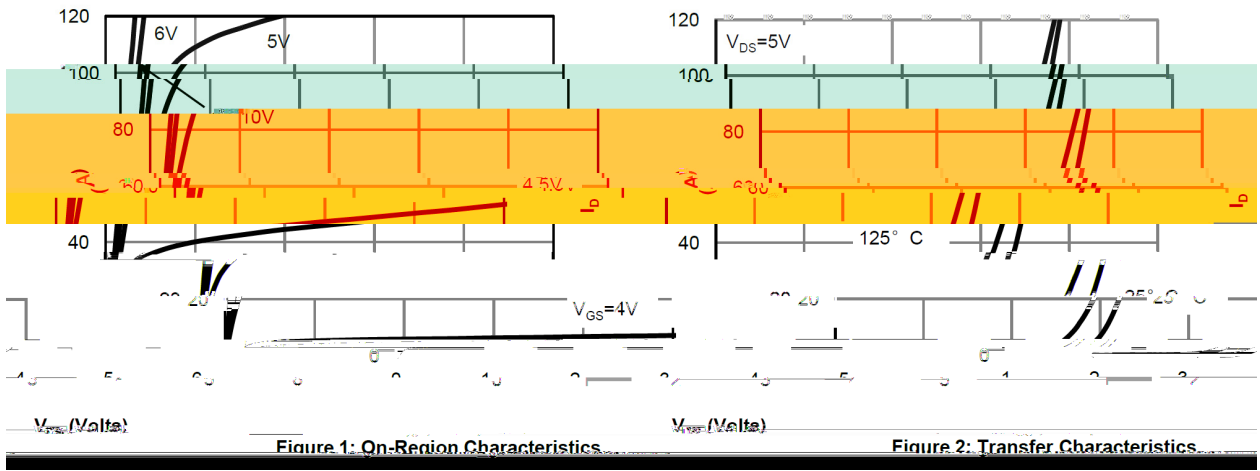


DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	100	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	180	A
Pulsed Drain Current	I_{DM}	385	A
Gate-Source Voltage	V_{GS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)	E_{AS}	563	mJ
Avalanche Current	I_{AS}	37.5	A
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	237	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient t = 10s	R_{JA}	17.7	

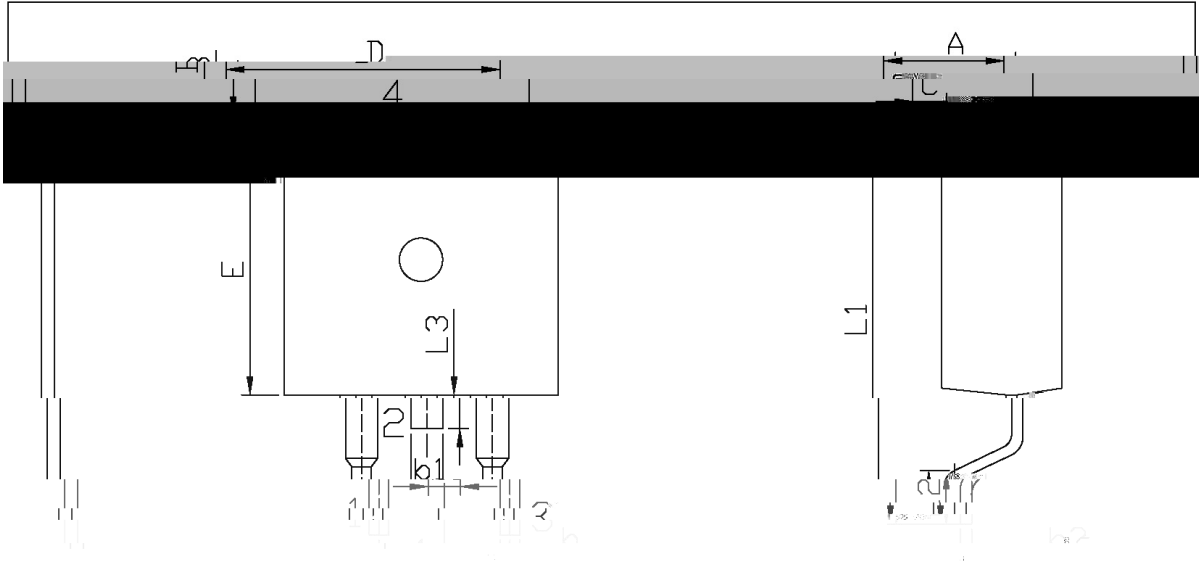
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=2.5$ $R_{GEN}=3$		25		ns
Turn-On Rise Time	t_r			17		
Turn-Off Delay Time	$t_{d(of)}$					

/ Electrical Characteristic Curve



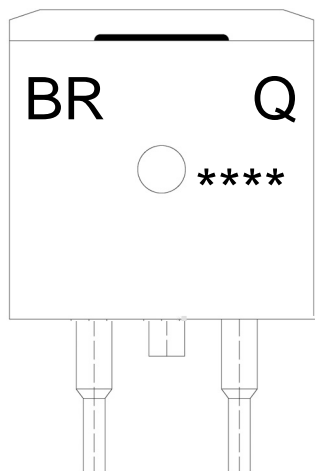
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/ Package Dimensions



Max	Min	Max	Min
9.14	4.30	4.71	9.00
2.74	1.00	1.40	2.34
15.00	16.00	1.15	1.25

/ Marking Instructions



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Note:

BR: Company Code

Q: Automobile halogen-free product Code

035N10SH: Product Type Code

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

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

Note:

- 1 150 200 60 120sec; 1.Preheating:150~200 , Time:60~120sec.
- 2 255..5 5..0.5sec; 2.Peak Temp.:255..5 , Duration:5..0.5sec.
- 3 2 10 /sec. 3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

605..5 P