

BRCS065N08SHBD

Rev.A Sep.-2022



DATA SHEET

TO-263

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Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	80	V
Drain Current		$I_D(T_C=25^\circ C)$	115	A
Pulsed Drain Current		I_{DM}	241	A
Gate-Source Voltage		V_{GS}	w 20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	710	mJ
Avalanche Current		I_{AS}	36.5	A
Total Power Dissipation		$P_D(T_C=25^\circ C)$	156.2	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	t 10s	R_{JA}	15.5	/W
	Steady-State		62.5	
Thermal Resistance-Junction to Case	Steady-State	R_{JC}	0.8	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	80	95		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=85V$ $V_{GS}=0V$			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			w 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	2	3	4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=20A$		5.1	6.5	m
	$R_{DS(on)}$	$V_{GS}=6V$ $I_D=10A$		7.0	10	
Forward On Voltage	V_{SD}	$V_{GS}=0V$ $I_S=1A$			1.2	V
Gate resistance	R_g	f=1MHz		1.4		
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ f=1MHz		3230		pF
Output Capacitance	C_{oss}			1310		
Reverse Transfer Capacitance	C_{rss}			185		
Total Gate Charge	$Q_{g(10V)}$	$V_{GS}=10V,$ $I_D=20A$ $V_{DS}=40V,$		46		nC
Gate Source Charge	Q_{gs}			13		
Gate Drain Charge	Q_{gd}			8.5		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ V_{DS}				

/ Electrical Characteristic Curve

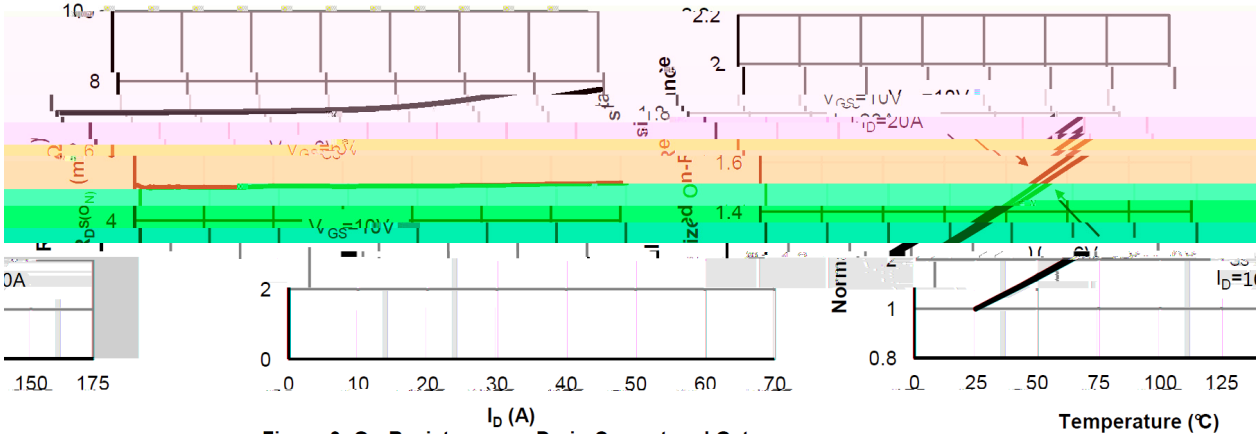
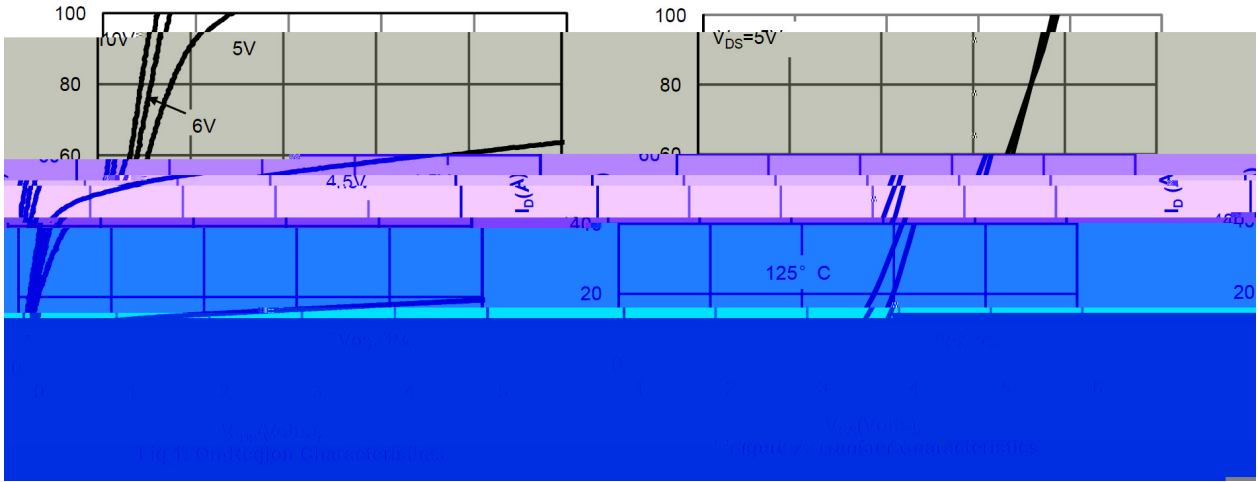
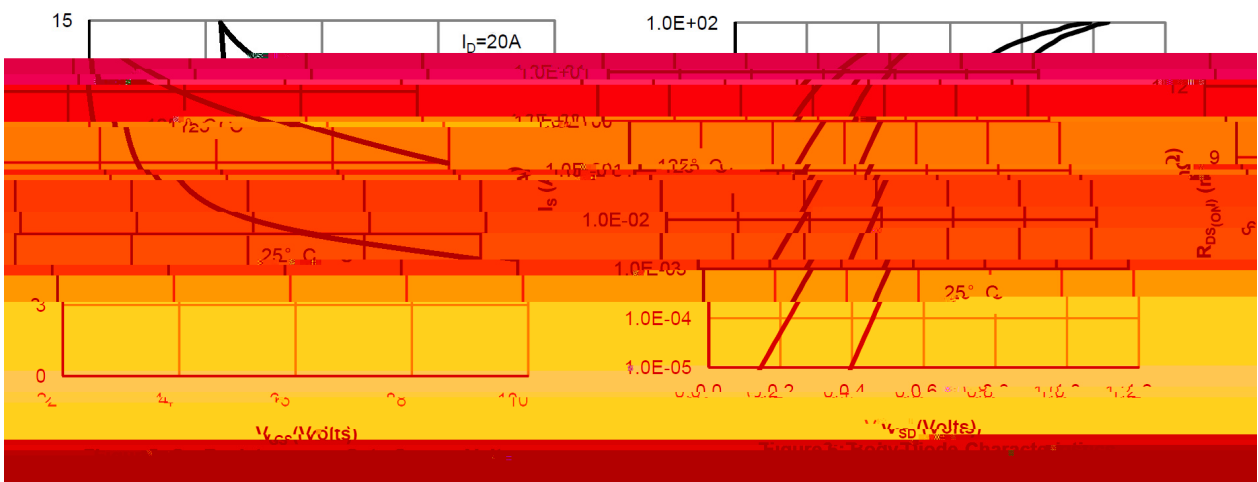


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

Figure 4: On-Resistance vs. Junction Temperature

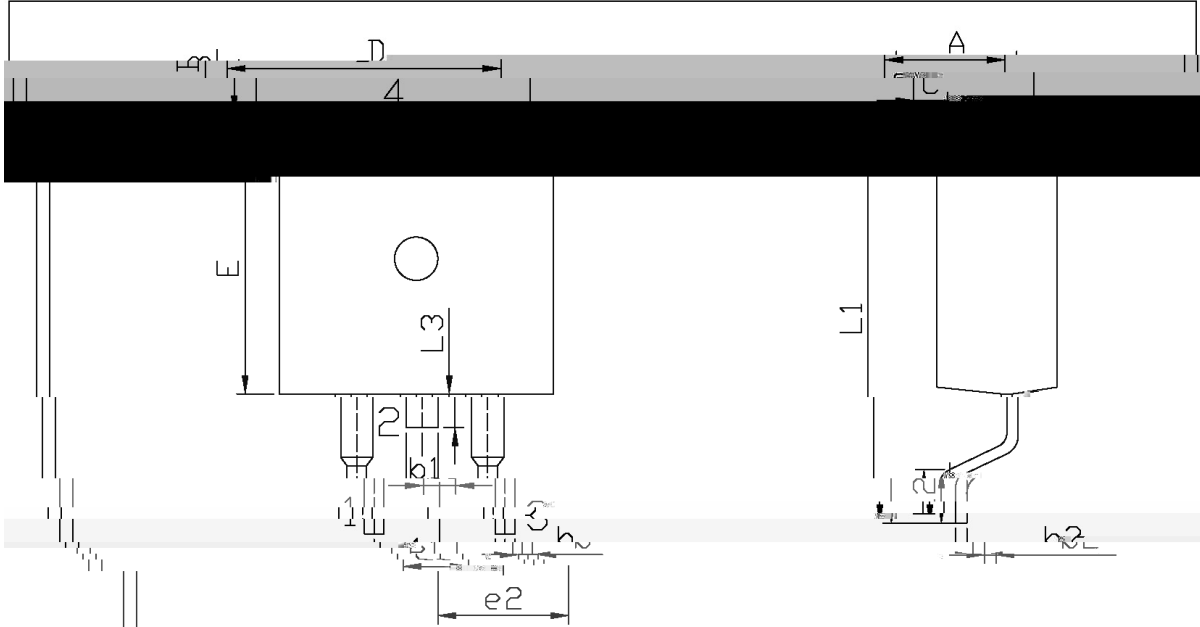


BRCS065N08SHBD

Rev.A Sep.-2022

DATA SHEET

/ Package Dimensions



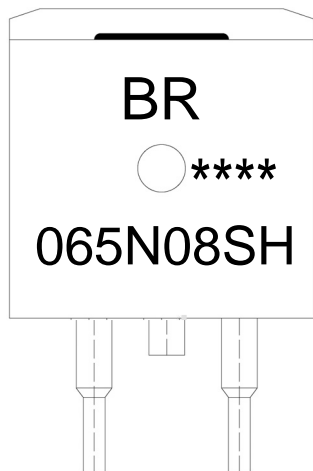
单位: mm

Dimensions in Millimeters		Dimensions in Millimeters		Dimensions in Millimeters		
Max	Min	Max	Min	Max	Min	
9.40		A	4.30	4.70	E	9.00
2.74		B	1.00	1.40	e1	2.34
					e2	

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/ Marking Instructions



Note:

BR: Company Code

065N08SH: Product Type

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

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