

BRC035N08SHRA

Rev.A Aug.-2022



DATA SHEET

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/ Descriptions

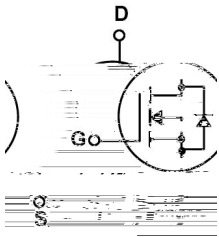
TO-220 N
N-CHANNEL MOSFET in a TO-220 Plastic Package.

/ Features

/ Applications

BMS appliances, High power inverter system, Power appliances

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 4 D PIN 3 S

/ Marking

See Marking Instructions.



Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	80	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	195	A
Pulsed Drain Current		I_{DM}	400	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy L=0.5mH		E_{AS}	1200	mJ
Avalanche Current		I_{AS}	47.5	A
Total Power Dissipation		$P_D(T_C=25^\circ\text{C})$	227	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	$^\circ\text{C}$
Thermal Resistance-Junction to Ambient	$t \leq 10\text{s}$	$R_{\theta JA}$	15	$^\circ\text{C/W}$
	Steady-State		60	
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	0.55	

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0\text{V}$	$I_D=250\mu\text{A}$	80	94		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=80\text{V}$	$V_{GS}=0\text{V}$			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20\text{V}$	$V_{DS}=0\text{V}$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$	$I_D=250\mu\text{A}$	2	2.9	4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}$	$I_D=30\text{A}$		2.9	3.5	

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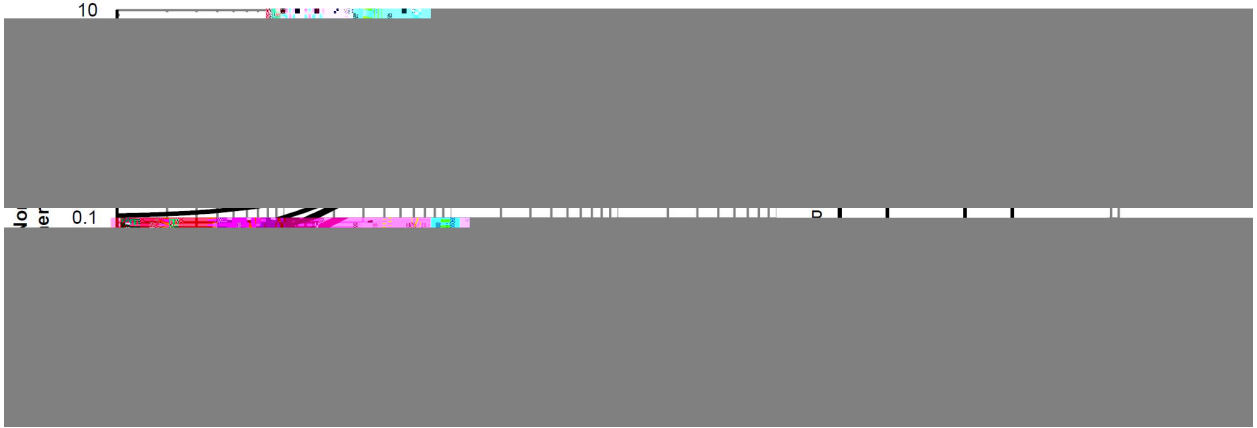
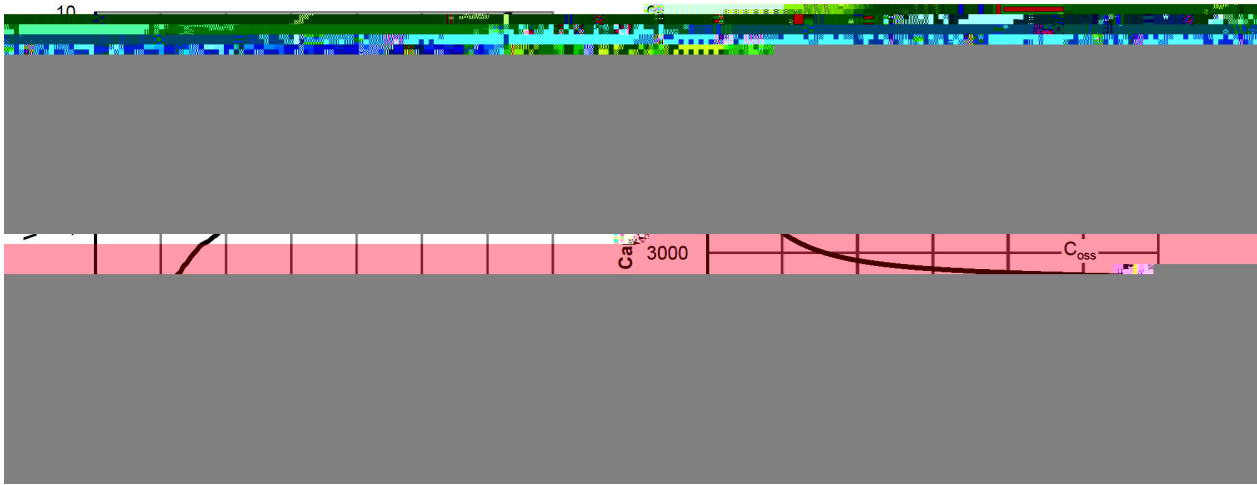


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Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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BRCS

/ Electrical Characteristic Curve

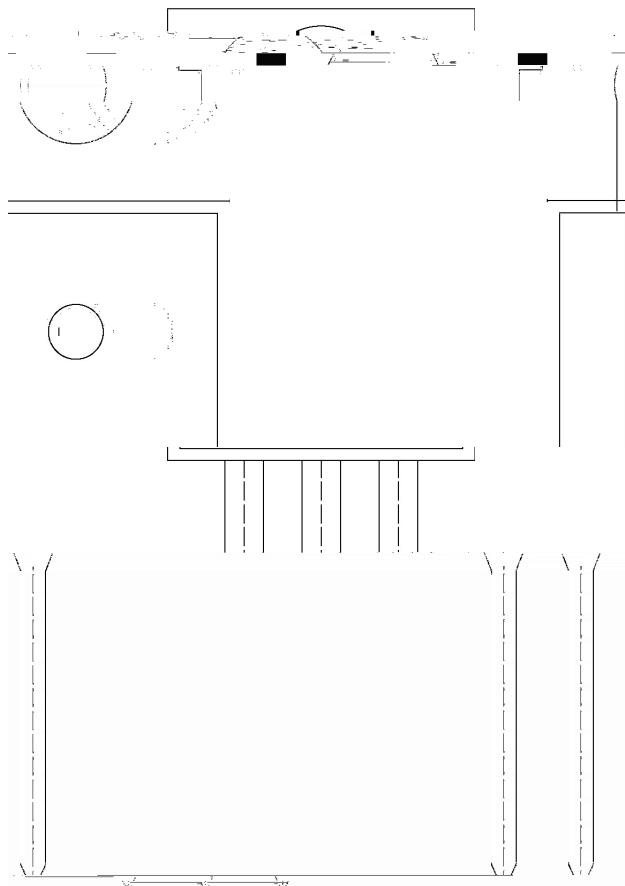


/ Package Dimensions



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	9.8	10.2	1.2	14
B	15.7	16.1	9.0	9.4
C	13.6	13.9	0.5	0.5
D	12.6	13.2	0.5	0.5
E	9.6	10.2	0.4	0.4
F	12.2	12.7	0.5	0.5
G	10.2	10.7	0.4	0.4
H	10.2	10.7	0.4	0.4

/ Marking Instructions



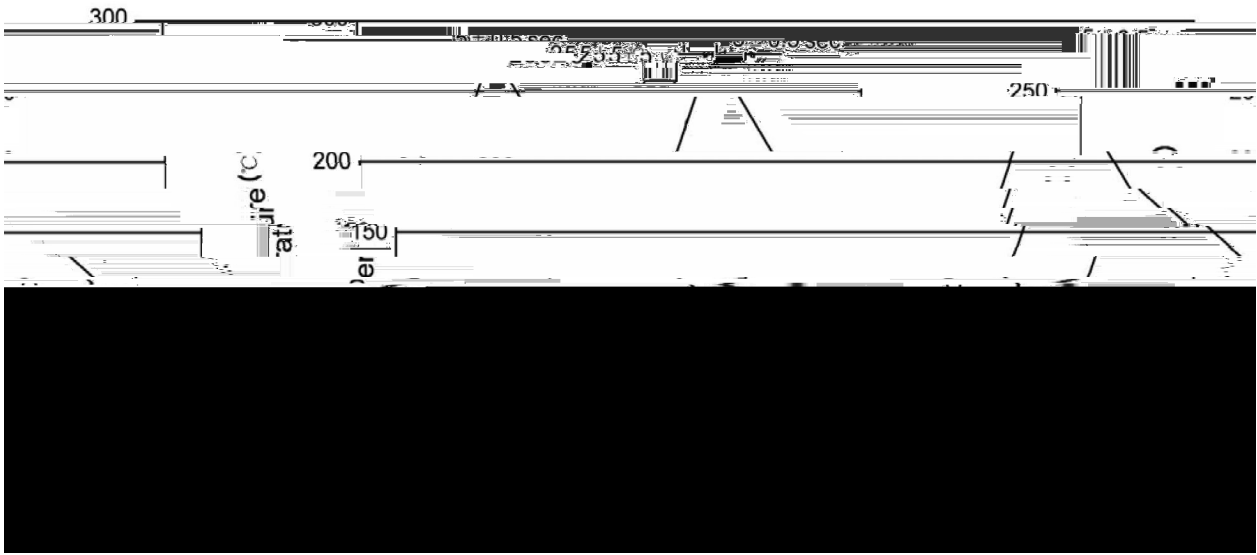
说明：

BR： 为公司代码

035N08S



() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|-----------|--|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150°C, Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 | | | 2 | 10°C/sec. | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

270±5°C 10±1 sec. Temp.:270±5°C Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension (unit mm ³)		
	只袋	袋盒	只盒	盒箱	只箱			

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	只套管	套管盒	只盒	盒箱	只箱			