
BRCS035N08SHRA

Rev.A Aug.-2022

DATA SHEET

/ Descriptions

TO-220 N

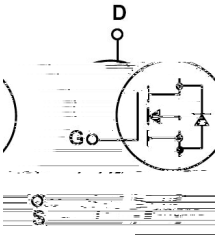
N-CHANNEL MOSFET in a TO-220 Plastic Package.

/ Features

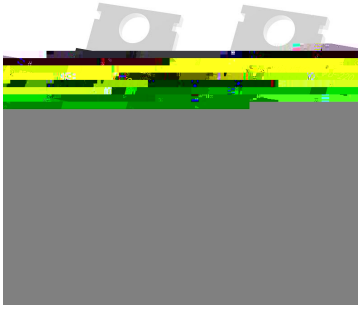
/ Applications

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(Tc=25℃)	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(Tc=25℃)	227	W
Junction and Storage Temperature Range		T_J,T_{STG}	-55 to 150	℃
Thermal Resistance-Junction to Ambient	t ≤ 10s	$R_{\theta JA}$	15	℃/W
	Steady-State		60	
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	0.55	

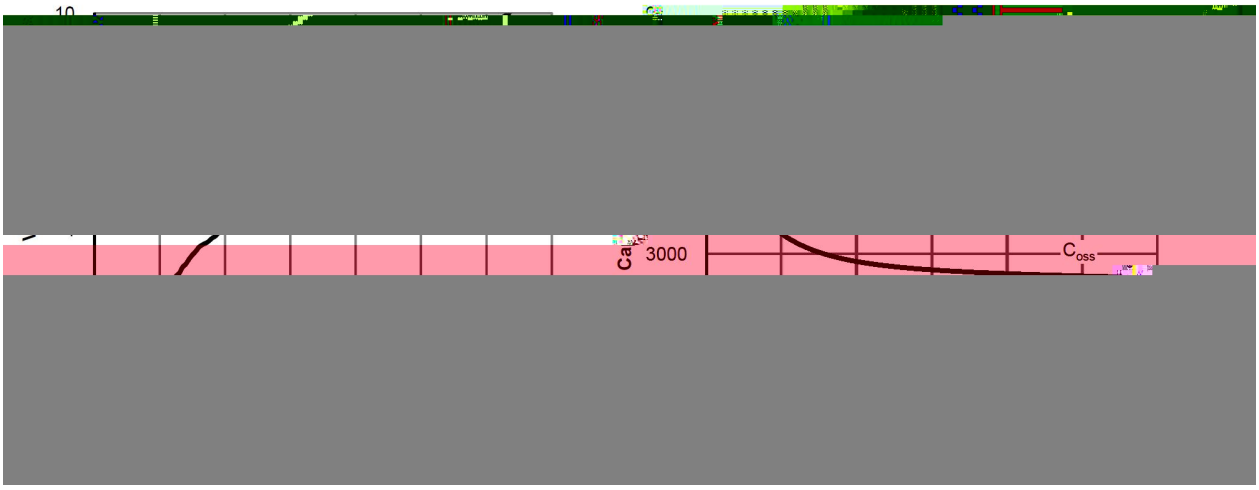
$ Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=250μA	80	94		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=80V	V_{GS}=0V			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V	V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}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

On R 30

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit

BRCS

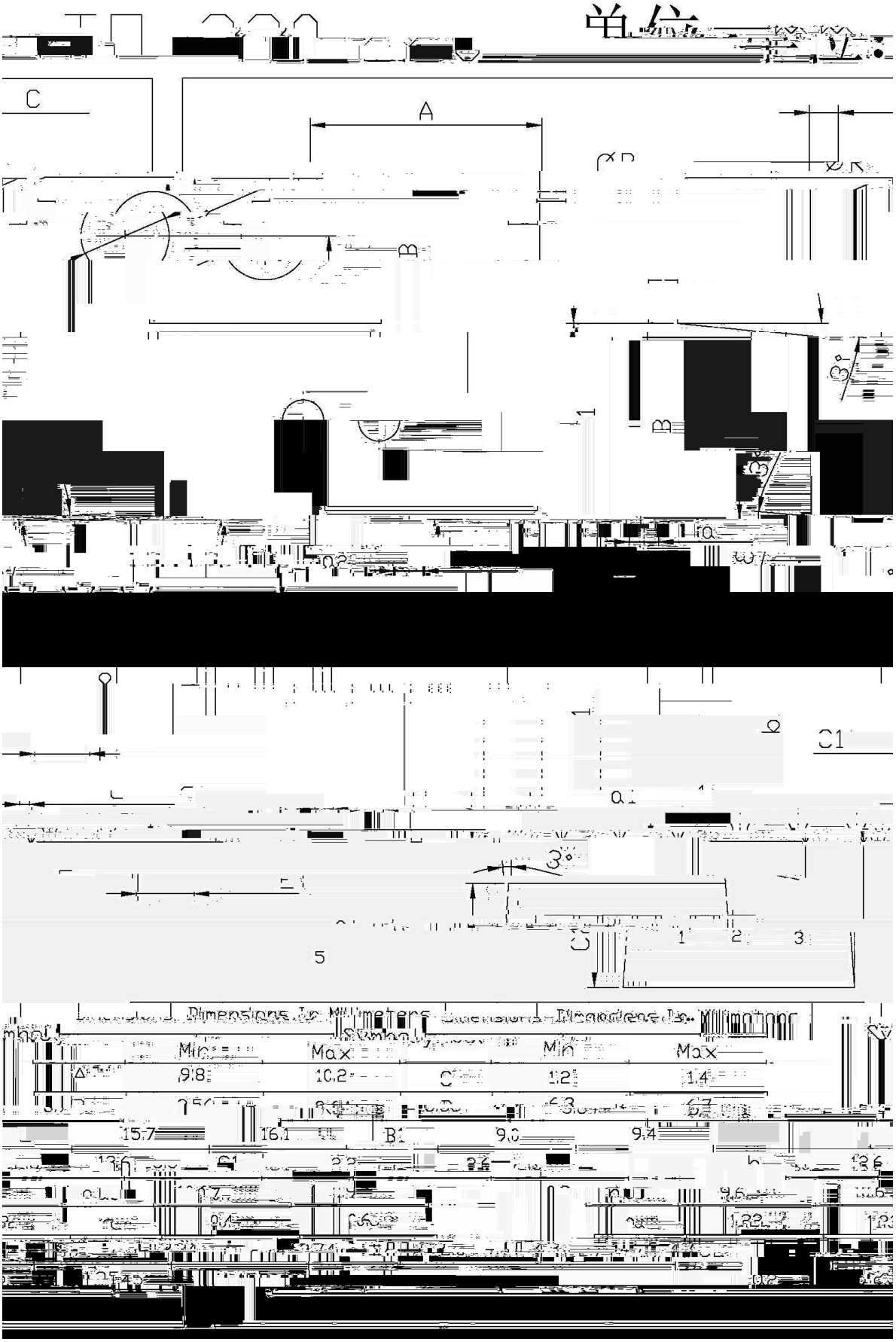
/ Electrical Characteristic Curve



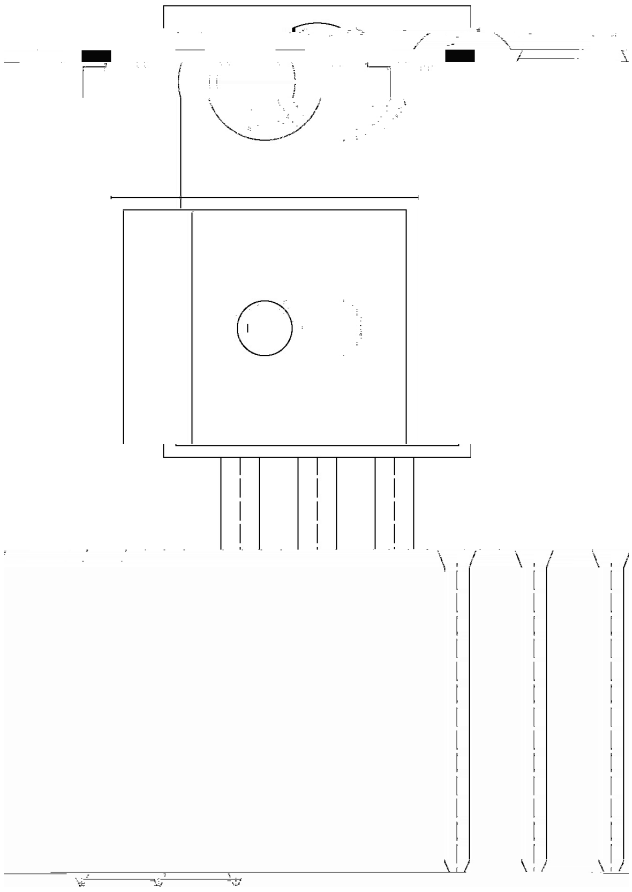




/ Package Dimensions



/ Marking Instructions

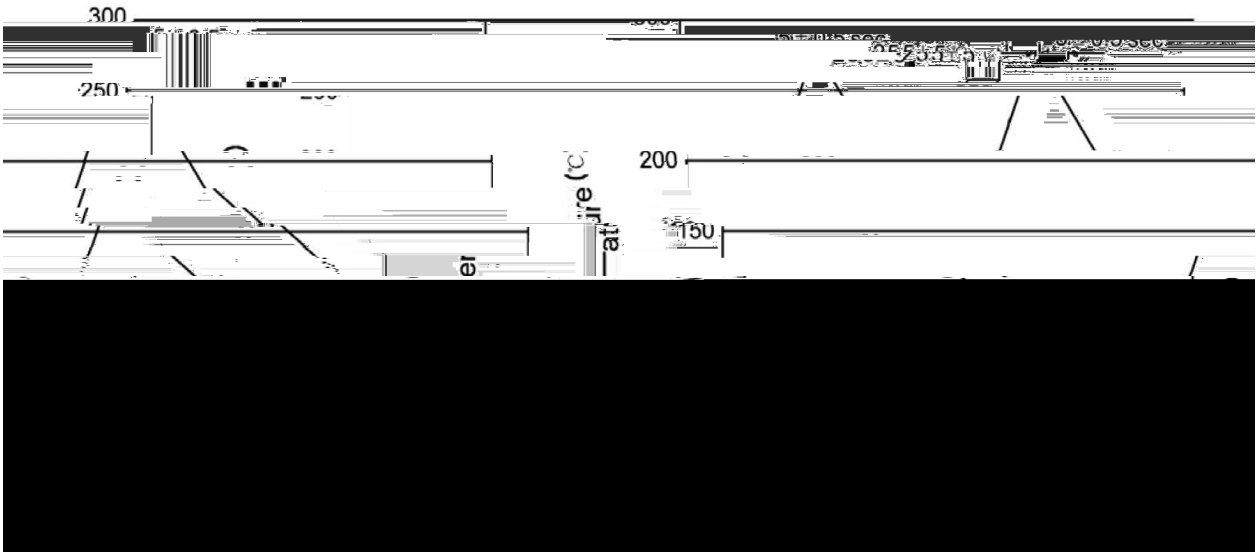


说明：

BR： 为公司代码

035N08S

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



				Note:
1	25 150		60 90sec;	1.Preheating:25~150℃, Time:60~90sec.
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

270±5℃	10±1 sec.	Temp.:270±5℃	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			