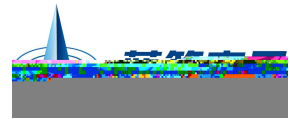


BRCS035N08SHRA

Rev.A Aug.-2022



DATA SHEET



/ Descriptions

TO-220 N

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

/ Features

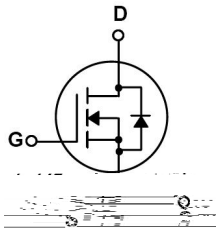
Ultra Low On-Resistance,fast switching.

/ Applications

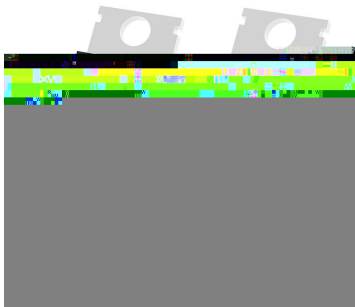
BMS

BMS appliances, High power inverter system, Power appliances

/ Equivalent Circuit



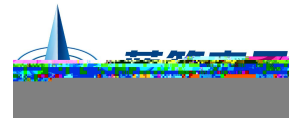
/ Pinning



PIN1 G PIN 2 4 D PIN 3 S

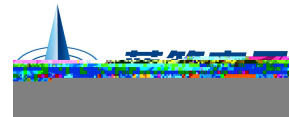
/ Marking

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 $L=0.5\text{mH}$	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	$^{\circ}\text{C}$

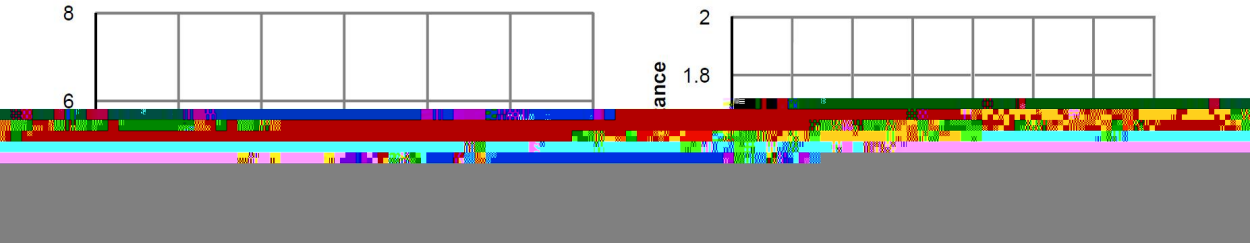
Thermal Resistance-Junction to Ambient $t \leq$



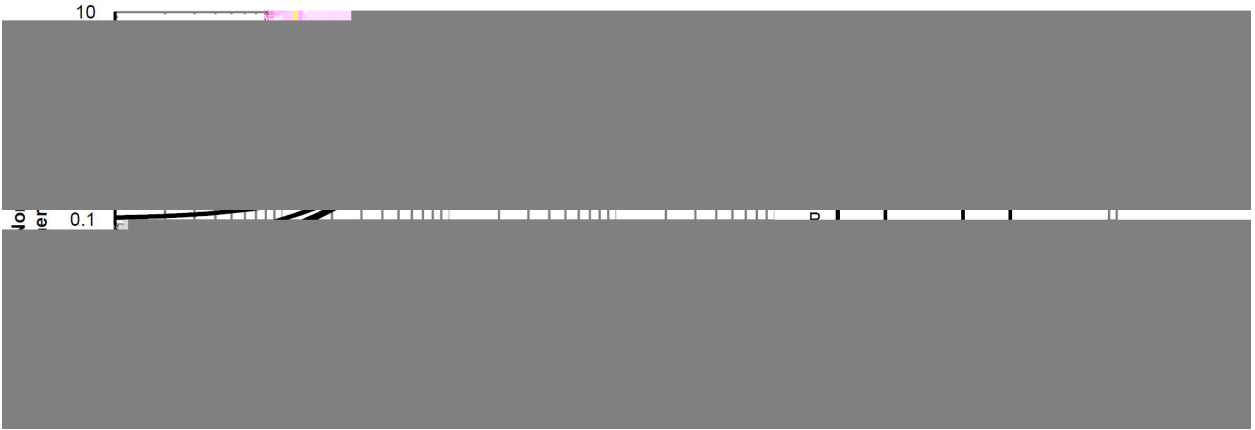
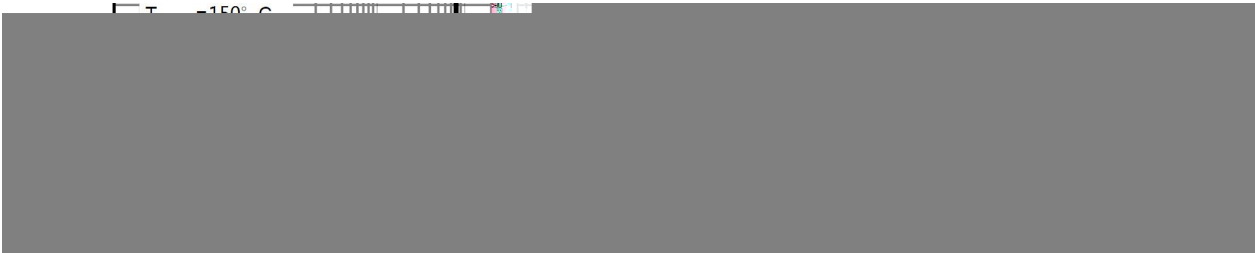
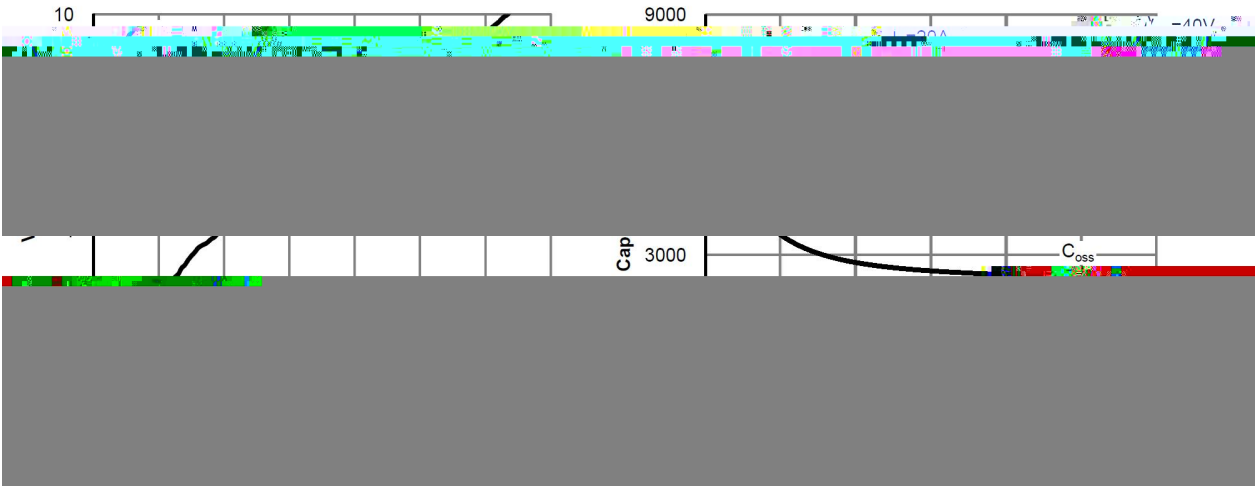
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate resistance	R_g	$f=1\text{MHz}$		1.6		Ω
Total Gate Charge	Q_g	$V_{GS}=10\text{V}$ $V_{DS}=40\text{V}$ $I_D=20\text{A}$		128		nC
Gate Source Charge	Q_{gs}			36		
Gate Drain Charge	Q_{gd}			23		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10\text{V}$ $V_{DS}=40\text{V}$ $R_L=2\Omega$ $R_{GEN}=3\Omega$		25		ns
Turn-On Rise Time	t_r			19		
Turn-Off Delay Time	$t_{d(off)}$			56		
Turn-Off Fall Time	t_f			18		

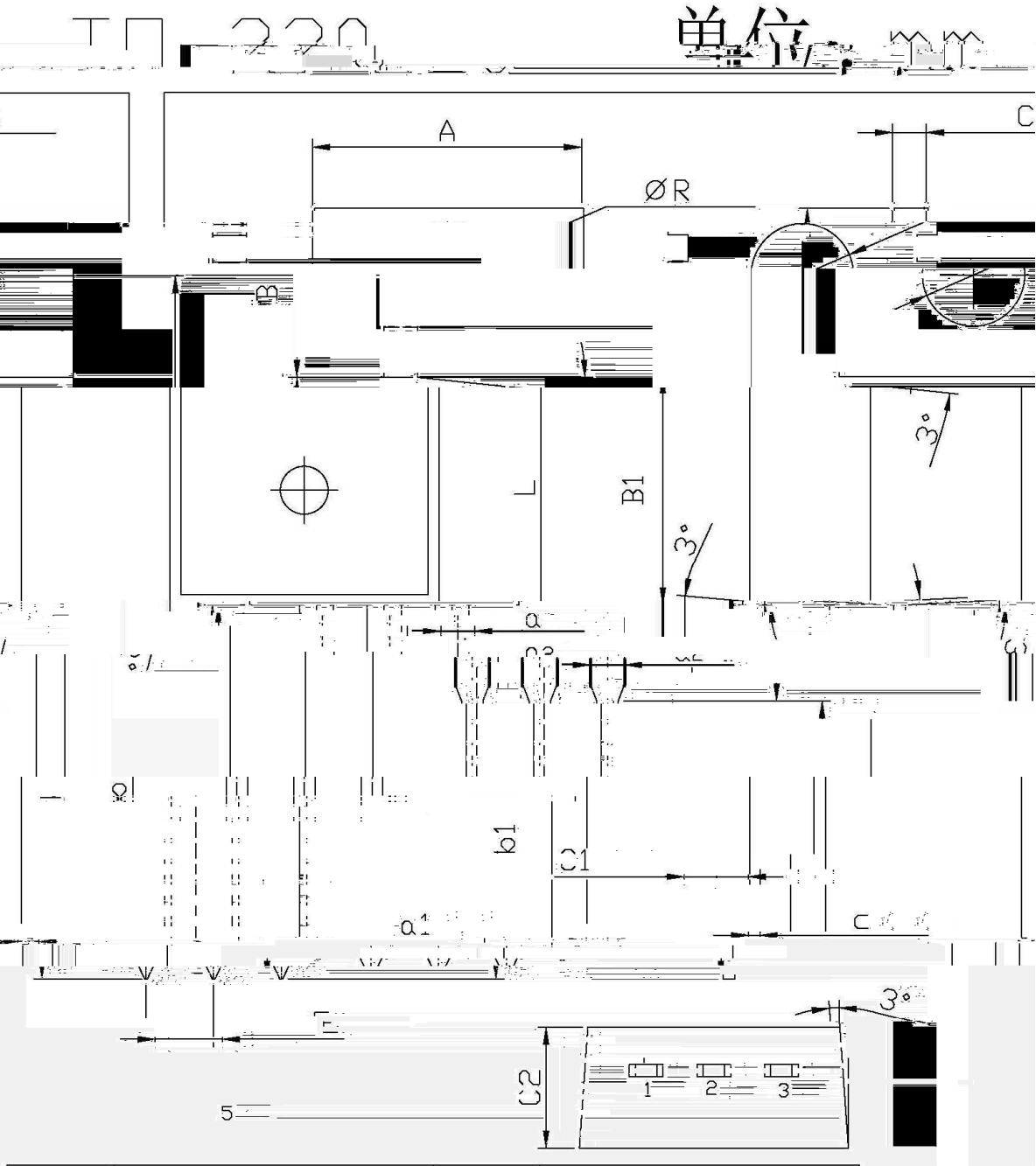
/ Electrical Characteristic Curve



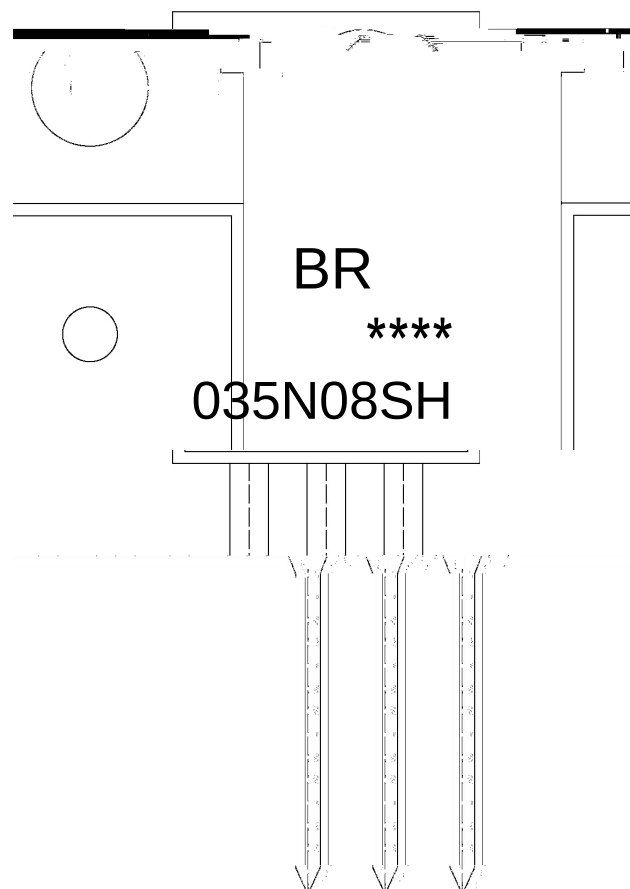
/ Electrical Characteristic Curve



/ Package Dimensions



Dimensions In Millimeters			Dimensions In Millimeters		
Symbol	Min	Max	Symbol	Min	Max
Δ	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
Δ	15.7	16.1	B1	9.3	9.4
Δ	12.6	13.6	C1	2.2	2.6
Δ	9.6	10.6	C2	0.7	0.9
Δ	1.23	1.33	Δ	0.4	0.6

/ Marking Instructions

说明：

BR： 为公司代码

035N08SH： 为型号代码

****： 为生产批号代码，随生产批号变化

Note:

BR: Company Code

035N08SH: Product Type

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



SHEET



o)

C.

/P