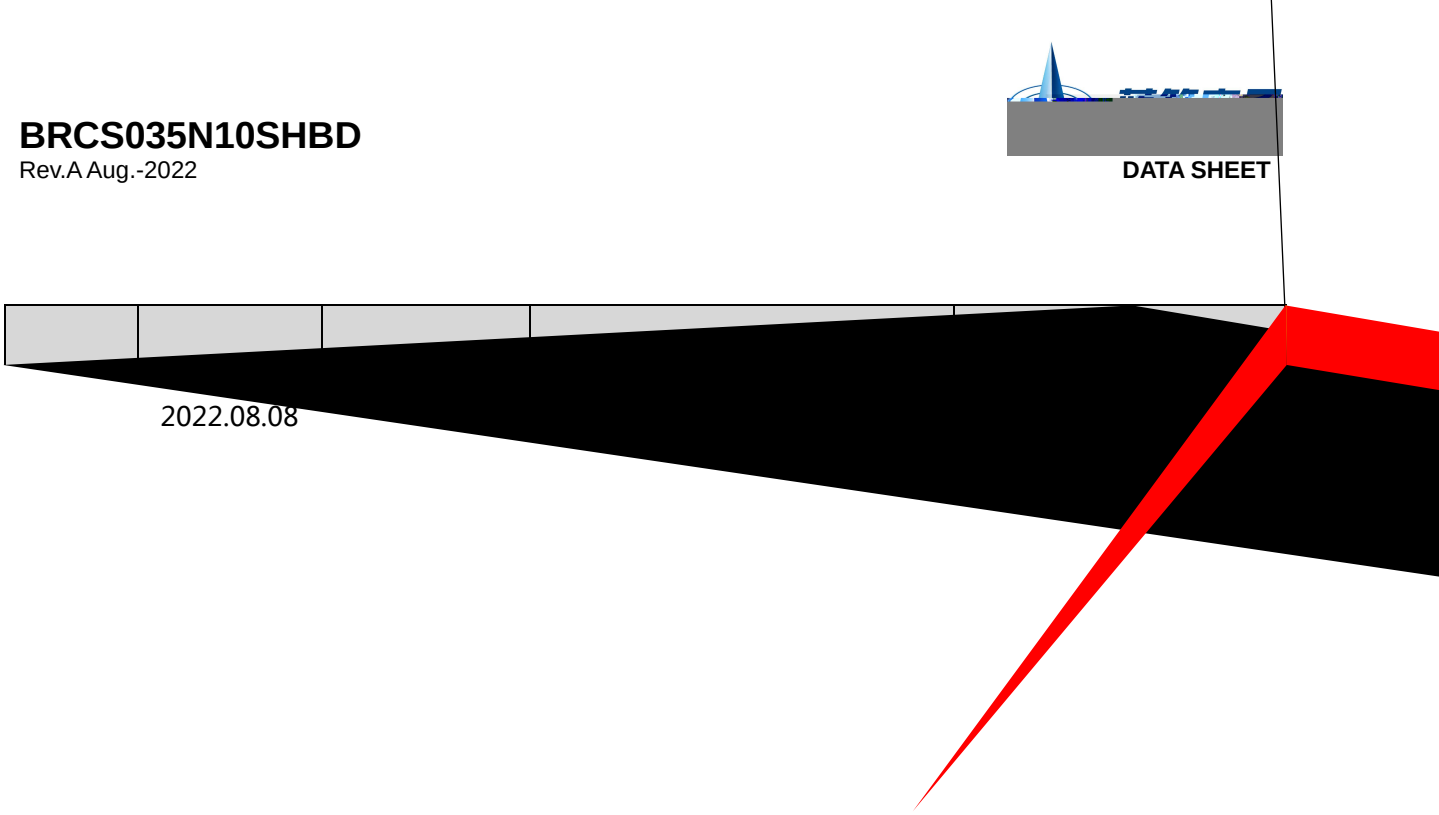
BRCS035N10SHBD

Rev.A Aug.-2022

DATA SHEET



BRCS035N10SHBD

Rev.A Aug.-2022

DATA SHEET

/ Descriptions

TO-263 N

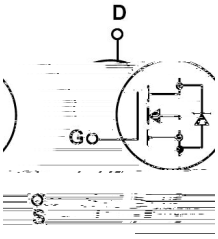
N-CHANNEL MOSFET in a TO-263 Plastic Package.

/ Features

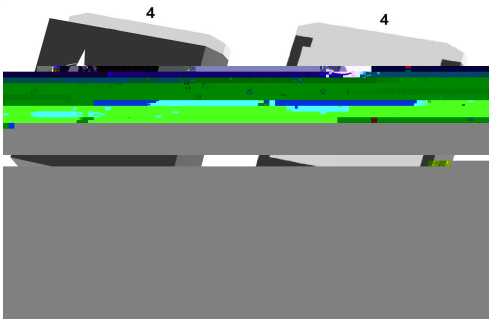
/ Applications

High frequency switching and synchronous rectification,BMS,Motor.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 4 D PIN 3 S

/ Marking

See Marking Instructions.

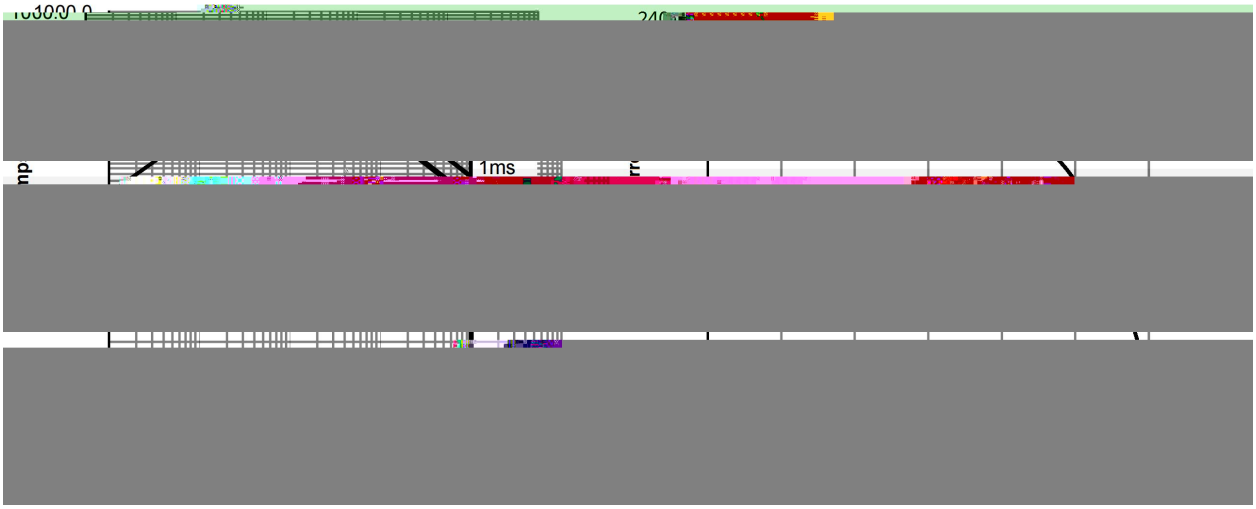
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	100	V
Drain Current		I_D(Tc=25℃)	180	A
Pulsed Drain Current		I_{DM}	385	A
Gate-Source Voltage		V_{GS}	±20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	563	mJ
Avalanche Current		I_{AS}	37.5	A
Total Power Dissipation		P_D(Tc=25℃)	237	W
Junction and Storage Temperature Range		T_J,T_{STG}	-55 to 150	℃
Thermal Resistance-Junction to Ambient	t≤10s	$R_{\theta JA}$	17.7	℃/W
	Steady-State		70.7	
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	0.53	

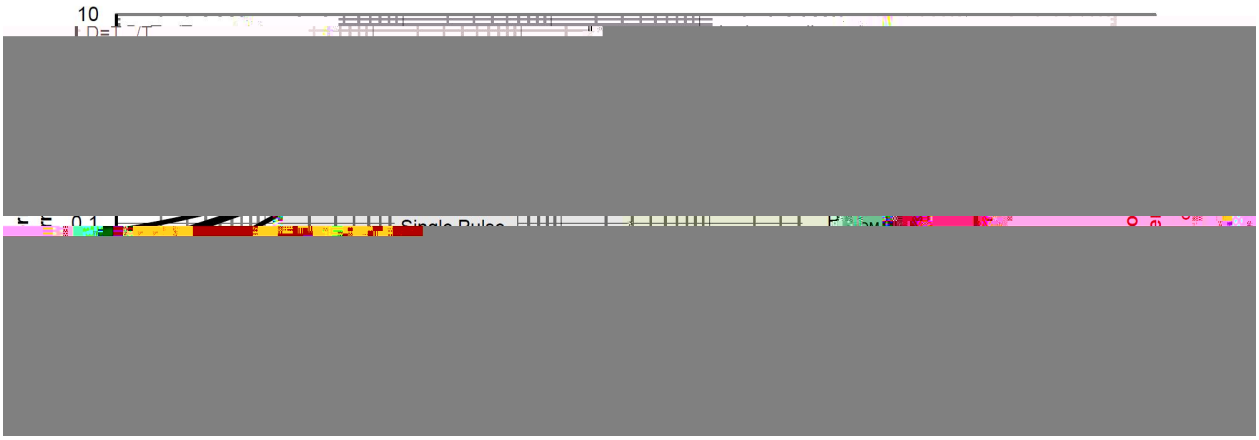
Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=250μA	100	112		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=100V	V_{GS}=0V			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V	V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	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=20A		3.5	4.0	mΩ

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

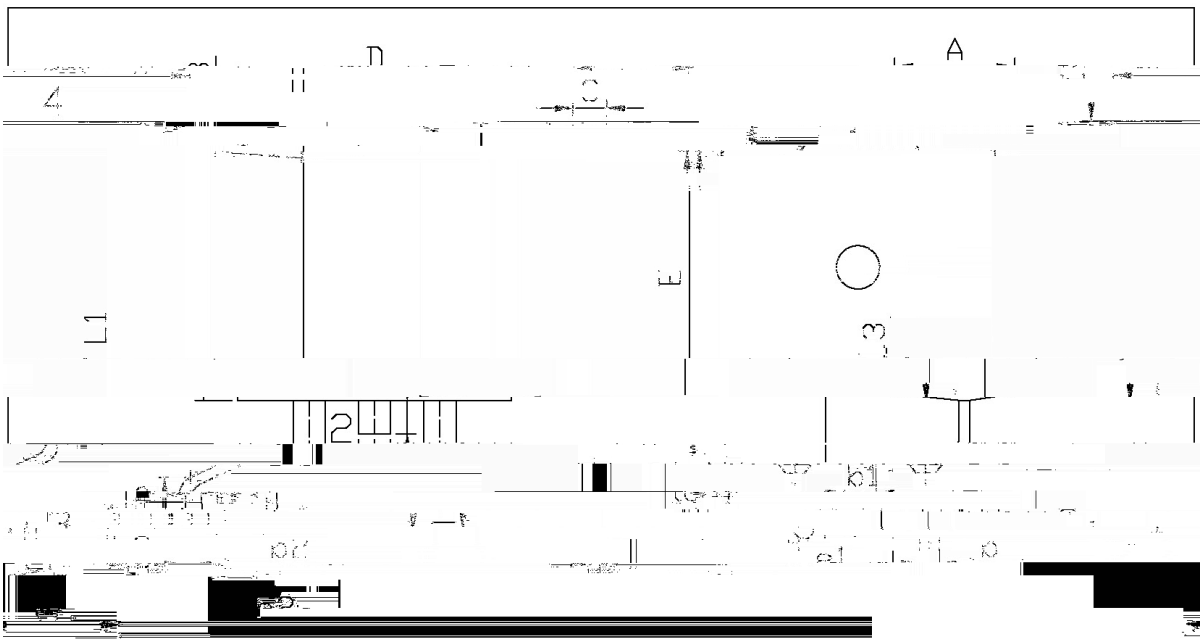
/ Electrical Characteristic Curve

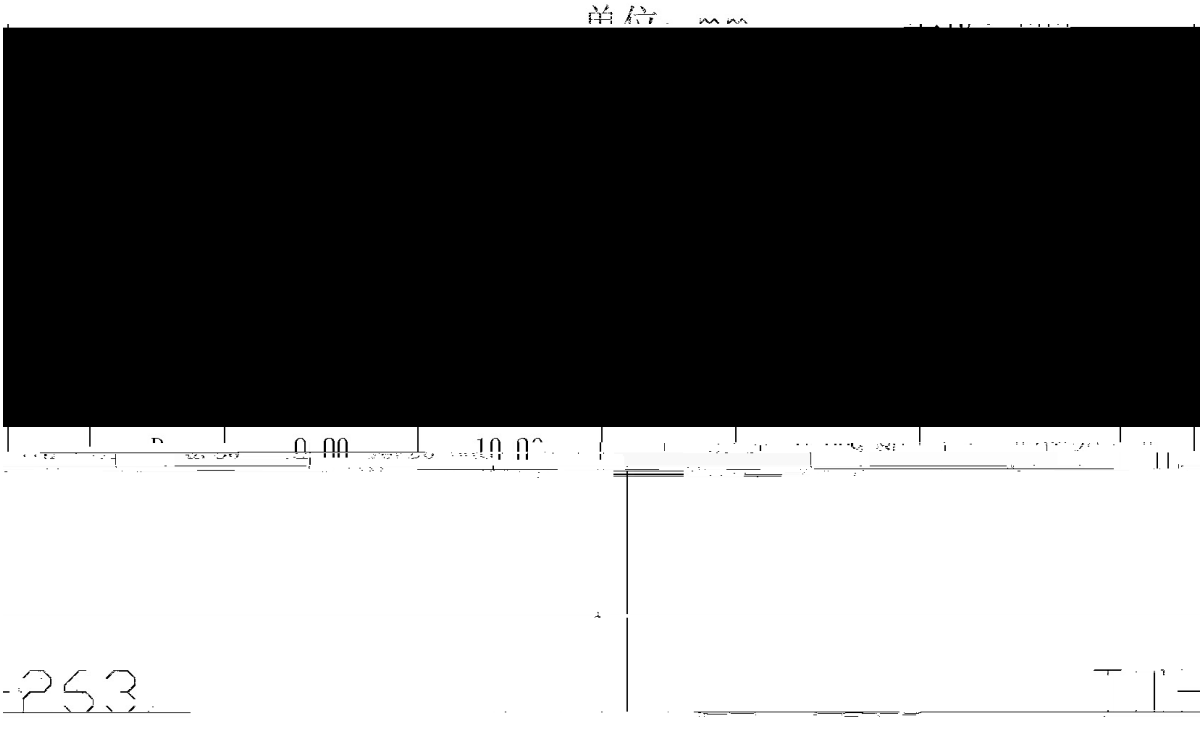




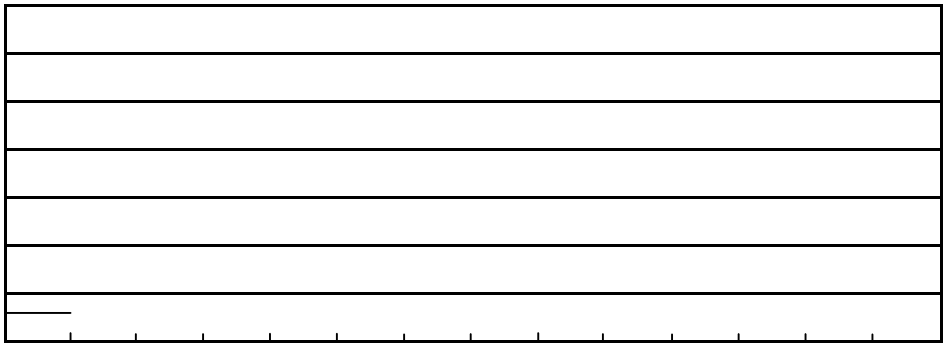


/ Package Dimensions





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



				Note:
1	150	180	60 90sec;	1.Preheating:150~180℃, Time:60~90sec.
2	245±5		5±0.5sec;	2.Peak Temp.:245±5℃, Duration:5±0.5sec.
3		2	10℃/sec.	3. Cooling Speed: 2~10℃/sec.

/ Resistance to Soldering Heat Test Conditions

260±5℃	10±1 sec.	Temp.:260±5℃	Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box 盒	Outer Box 箱
TO-263	800	1	800	6	4,800	13″ ×24	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube 套管	Inner Box 盒	Outer Box 箱
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices