/ Descriptions

TO-263 N

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

/ Features

,

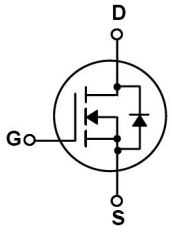
Ultra Low On-Resistance,fast switching,HF Product.

/ Applications

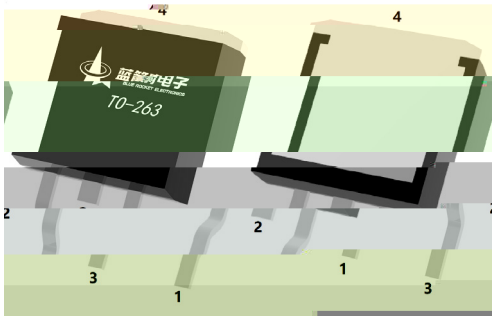
BMS

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)	212	A
Pulsed Drain Current		I_{DM}	445	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	1000	mJ
Avalanche Current		I_{AS}	50	A
Total Power Dissipation		P_D(Tc=25)	260	W
Junction and Storage Temperature Range		T_J,T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	t ≤ 10s	R_{JA}	13	/W
	Steady-State		58	
Thermal Resistance-Junction to Case	Steady-State	R_{JC}	0.48	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit

Parameter 5055a₹ȷTT4 1 Tf2.8790aa107da045eTD0 Tc( )Tȷ22 166 -1.3886 TD-.00057 TP

/ Electrical Characteristic Curve

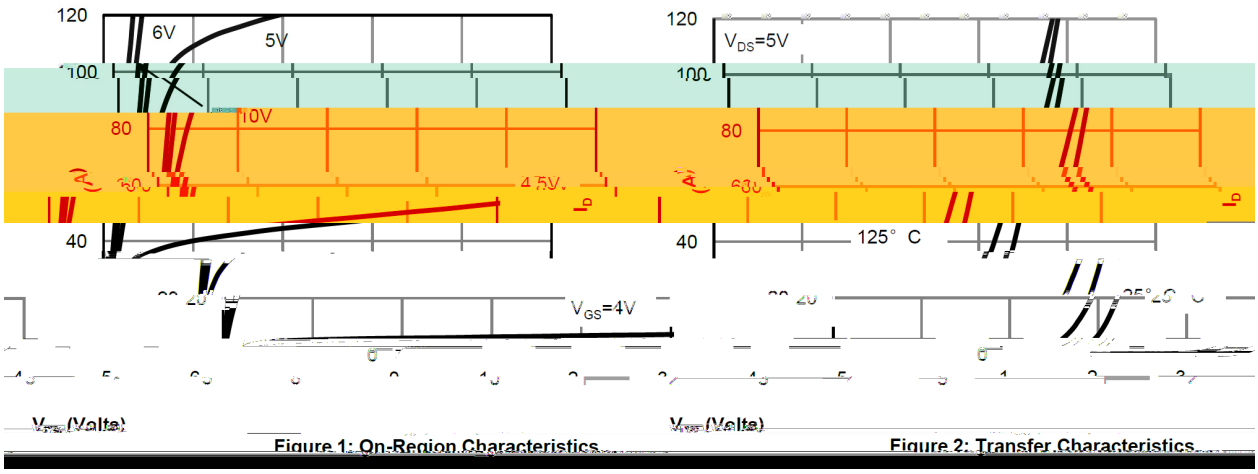
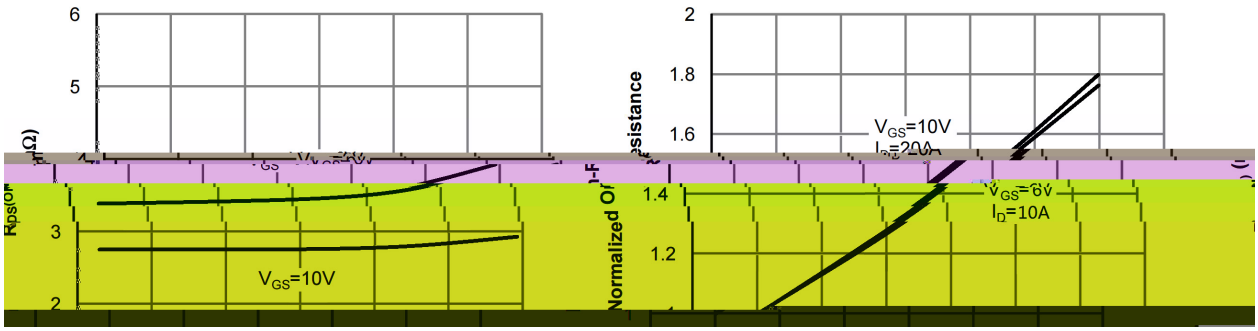


Figure 1: On-Region Characteristics

Figure 2: Transfer Characteristics



/ Electrical Characteristic Curve

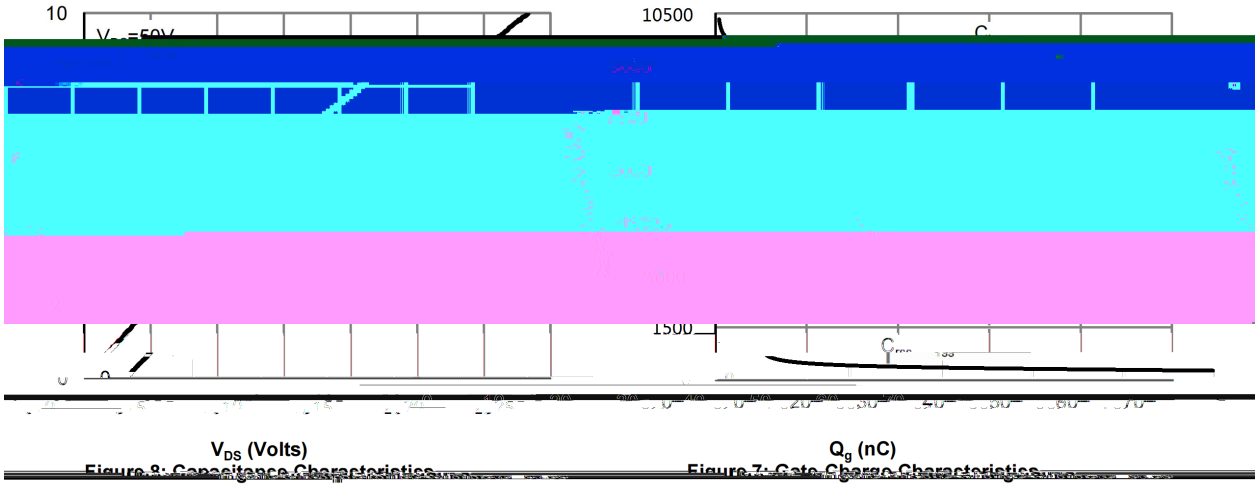
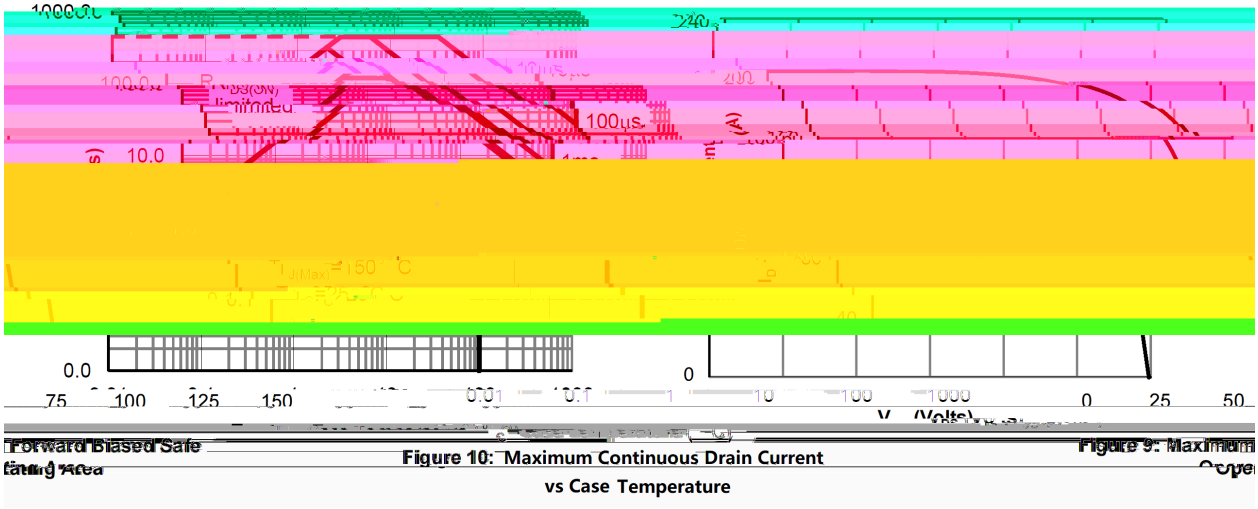


Figure 8: Capacitance Characteristics

Figure 7: Gate Charge Characteristics



Forward Biased Safe Operating Area

Figure 10: Maximum Continuous Drain Current vs Case Temperature

Figure 9: Maximum

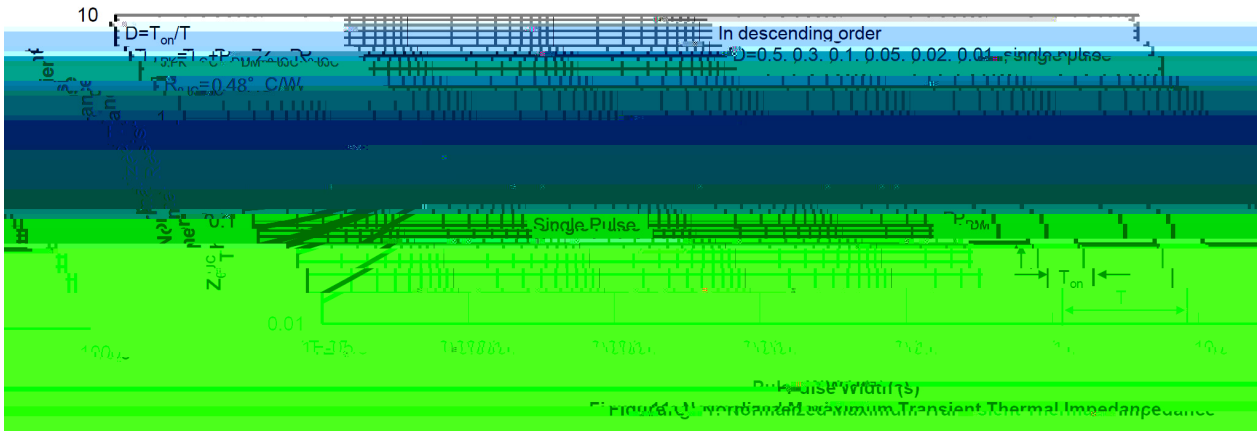
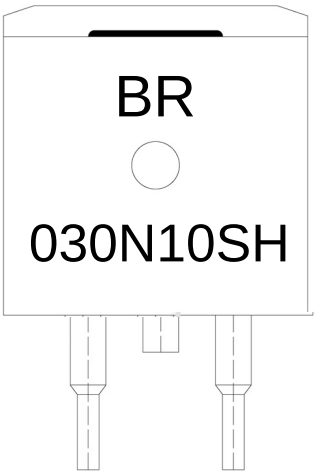


Figure 11: Normalized Maximum Transient Thermal Impedance

BRCS030N10SHBD

Rev.A Sep. 6(.)220-N1.9(2(p)220)21824.2(p)222(p)22

/ Marking Instructions



BR

030N10SH

****

Note:

BR:	Company Code
030N10SH:	Product Type
****:	Lot No. Code, code change with Lot No

( ) / 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

605±5