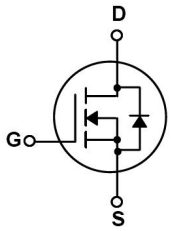
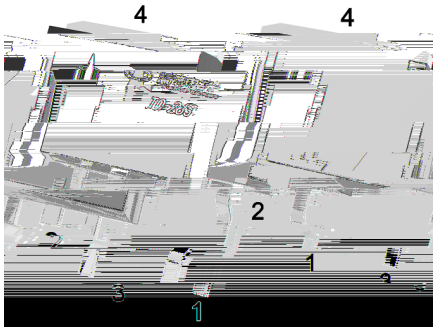
TO-263 N

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

High frequency switching and synchronous rectification,BMS,Motor, Meet the stringent requirements of automotive applications.





PIN1 G PIN 2 4 D PIN 3 S

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	

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

/ Electrical Characteristic Curve

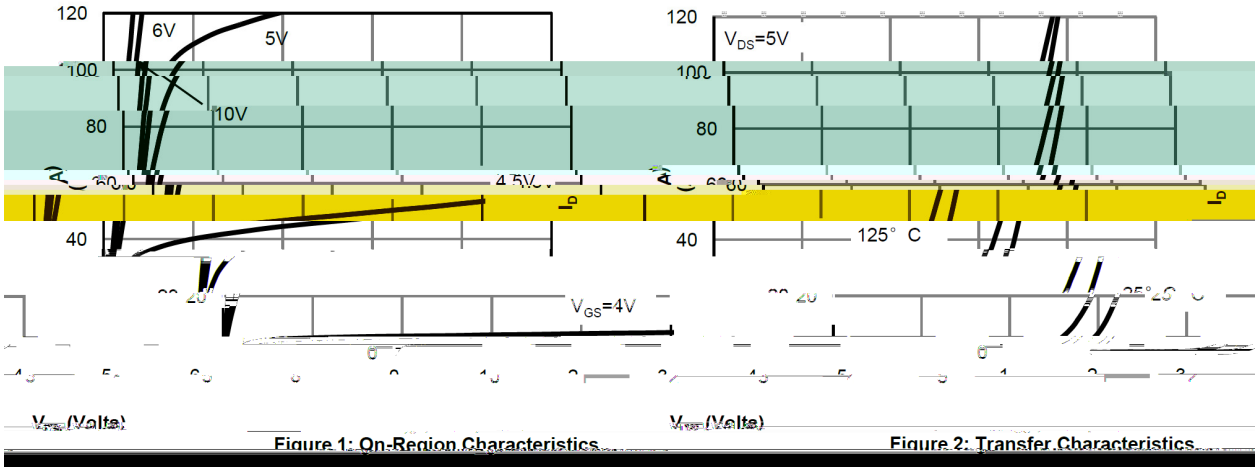


Figure 1: On-Region Characteristics

Figure 2: Transfer Characteristics

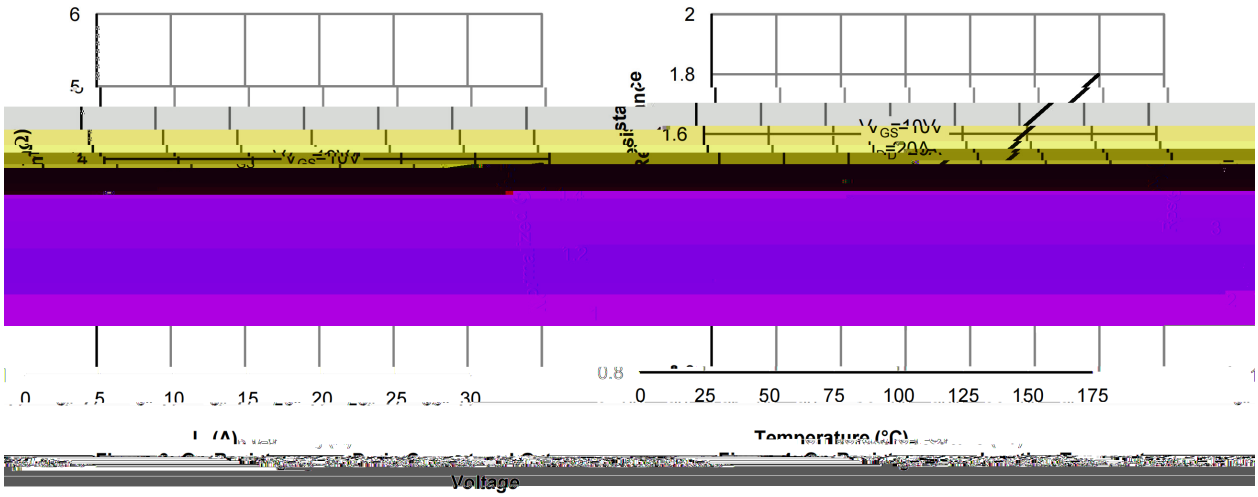


Figure 3: On-Resistance Variation with Drain Current and Gate Voltage

Figure 4: On-Resistance Variation with Temperature

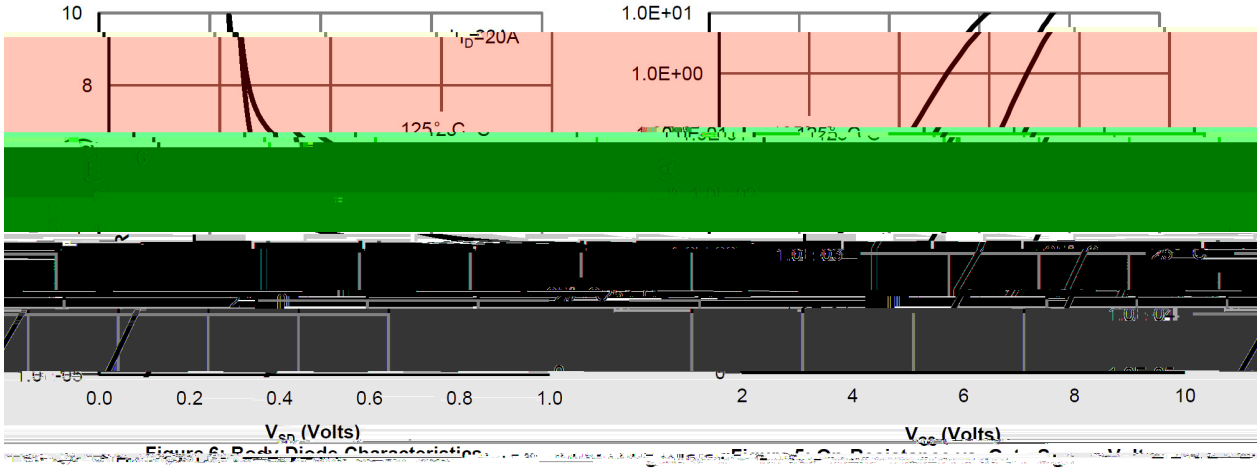
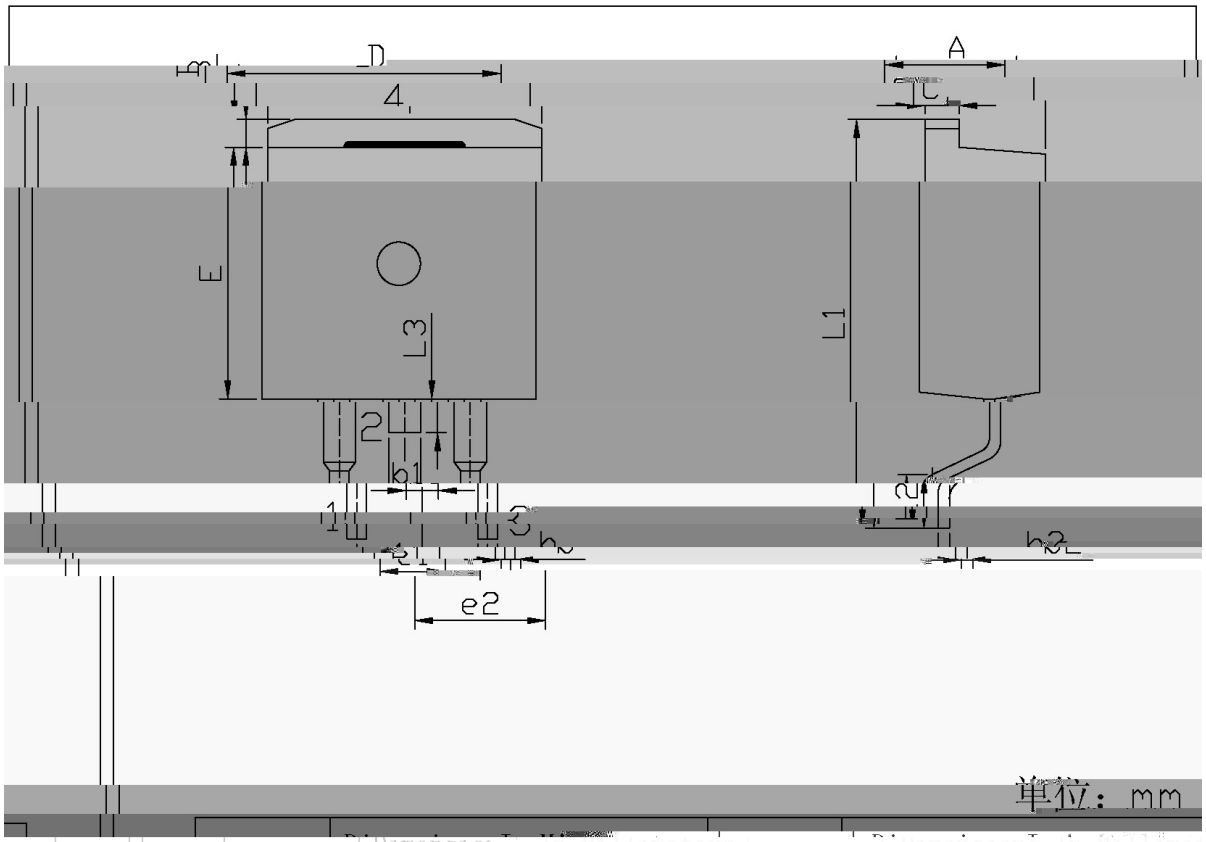


Figure 6: Body Diode Characteristics

Figure 5: On-Resistance vs. Gate-to-Source Voltage

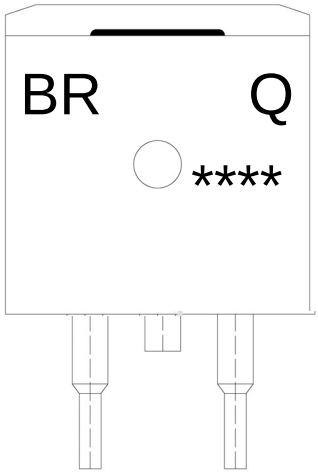
BRCS035N10SHBDQ

/ Package Dimensions



Max		Min	Max		Min
	A	4.30			
2.74	B	1.00	1.40	e1	2.34
16.00	b1	1.15	1.35	L1	

/ Marking Instructions



Q

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
035N10SH:	Product Type Code
****:	Lot No. Code, code change with Lot No

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

Note:

1	150 200 60 120sec;	1.Preheating:150~200 , Time:60~120sec.
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

605 5 P