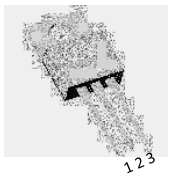
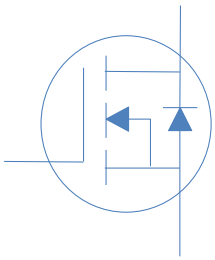
100V N-Ch Power MOSFET

V_{DS}		100	V
$R_{DS(on),typ}$	TO-263	6.1	mΩ
$R_{DS(on),typ}$	TO-220	6.4	mΩ
I_D		100	A





Part Number	Package	Marking
HGB082N10M	TO-263	GB082N10M
HGP082N10M	TO-220	GP082N10M

Absolute Maximum Ratings at T_j=25 (unless otherwise specified)

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current	I_D	T_C=25	100	A
		T_C=100	71	
Drain to Source Voltage	V_{DS}	-	100	V
Gate to Source Voltage	V_{GS}	-	±20	V
Pulsed Drain Current	I_{DM}	-	390	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.5mH, T_C=25	400	mJ
Power Dissipation	P_D	T_C=25	176	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to175	

Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-Case	$R_{\theta JC}$	0.85	/W
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	65	/W

Fig 1. Typical Output Characteristics

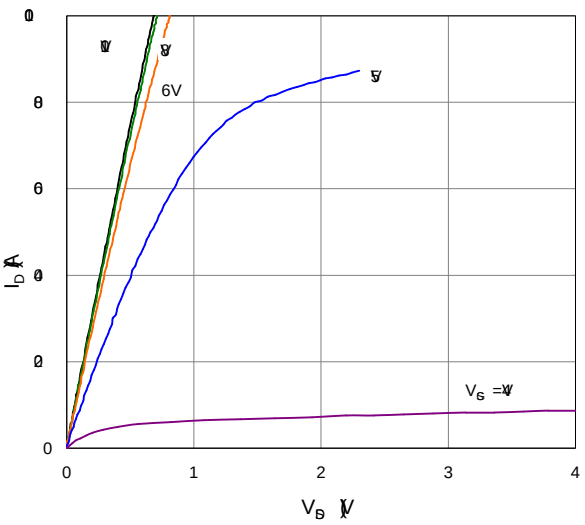


Figure 2. On-Resistance vs. Gate-Source Voltage

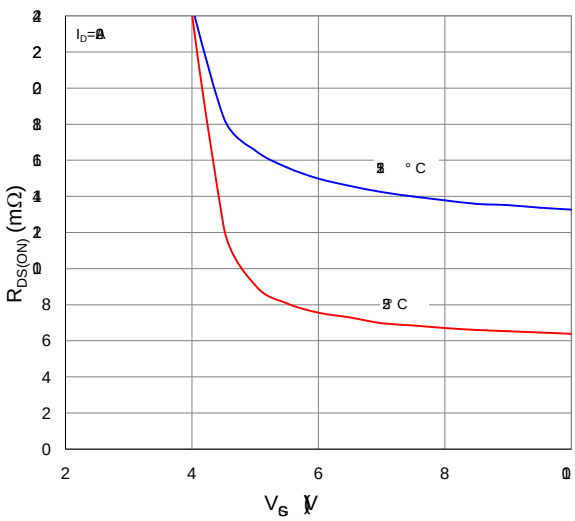


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

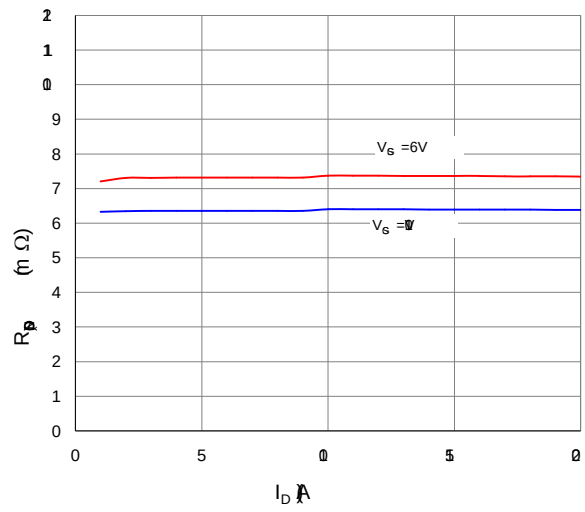


Figure 4. Normalized On-Resistance vs. Junction Temperature

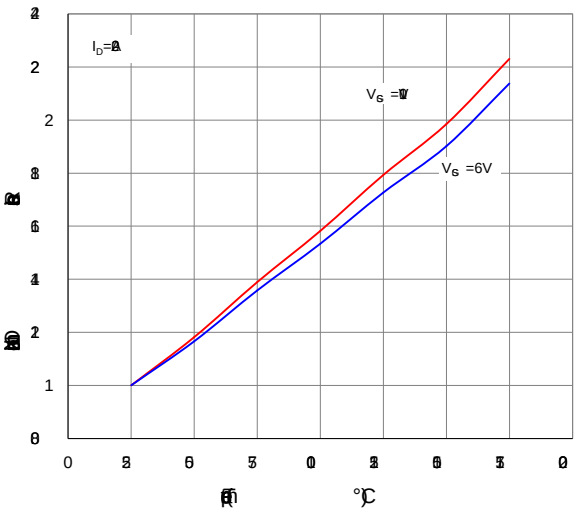


Figure 5. Typical Transfer Characteristics

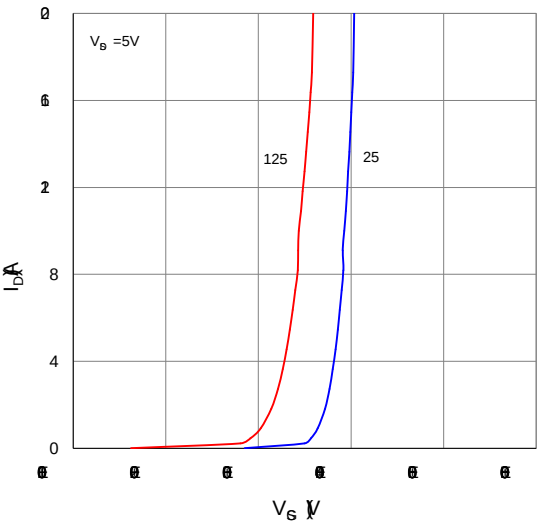
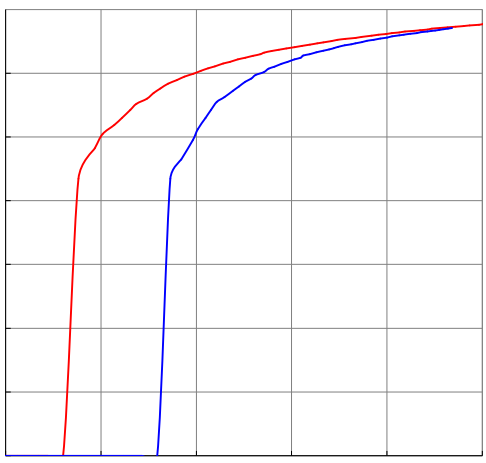
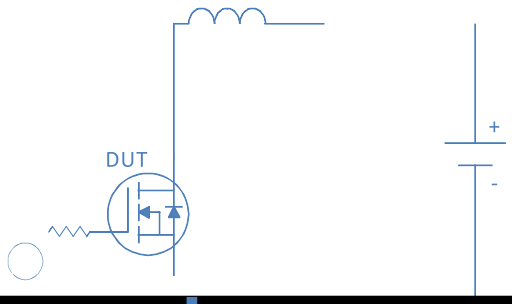


Figure 6. Typical Source-Drain Diode Forward Voltage



Inductive switching Test	

Gate Charge Test	

Uclamped Inductive Switching (UIS) Test