



Turn - on switching loss	$E_{on}$					J
Turn - off switching loss	$E_{off}^{*3}$	-	243	-		

● ; U h Y ' 7 \ U f [ Y ' W \ U f U W h Y f ] g h ] W g ' ( T a = 25 ° C )

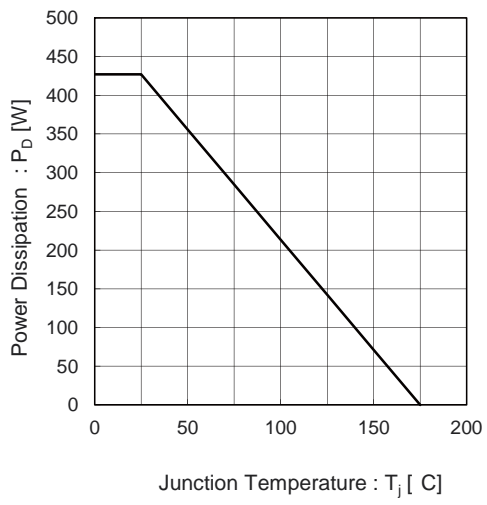
Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Total gate charge	$Q_g^{*3}$	$V_{DD} = 600V$	-	178	-	
Gate - Source charge	$Q_{gs}^{*3}$	$I_D = 36A$	-	40	-	nC
Gate - Drain charge	$Q_{gd}^{*3}$	$V_{GS} = 18V$	-	80	-	
Gate plateau voltage	$V_{(plateau)}$	$V_{DD} = 600V, I_D = 36A$	-	9.6	-	V

\*1 Limited only by maximum temperature allowed.

\*2 PW 10 s, Duty cycle 1%

\*3 Pulsed

Fig.1 Power Dissipation Derating Curve



D

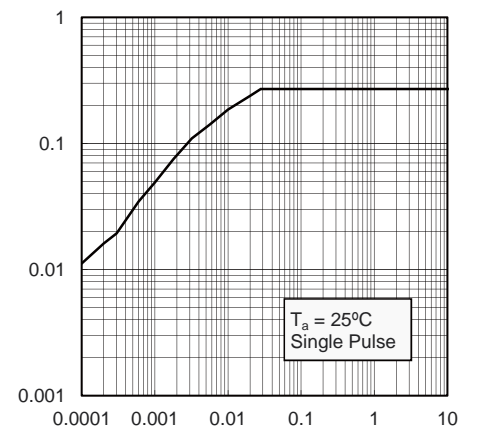


Fig.10 Gate Threshold Voltage vs. Junction Temperature

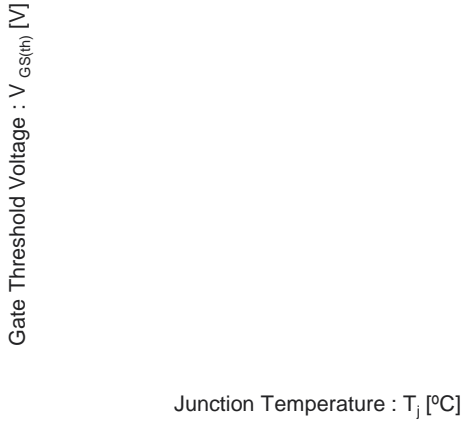


Fig.11 Transconductance vs. Drain Current

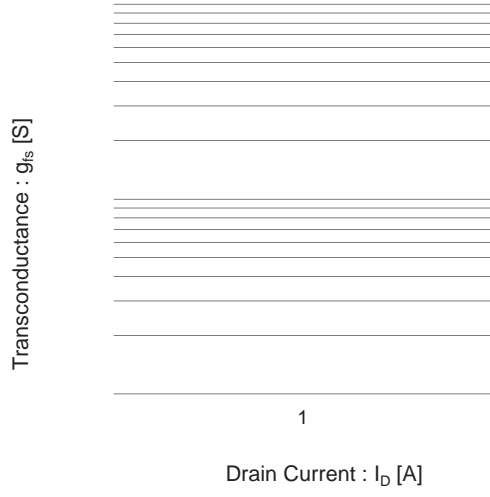


Fig.19 Typical Switching Loss vs. Drain - Source Voltage

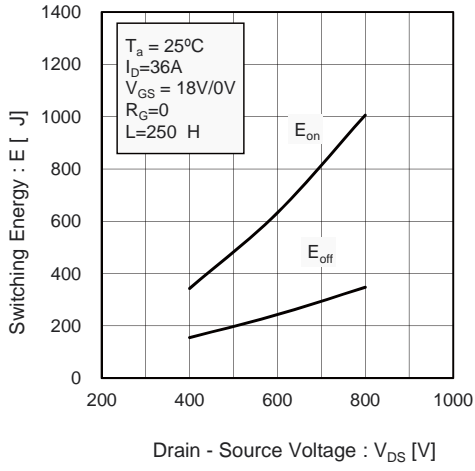


Fig.20 Typical Switching Loss vs. Drain Current

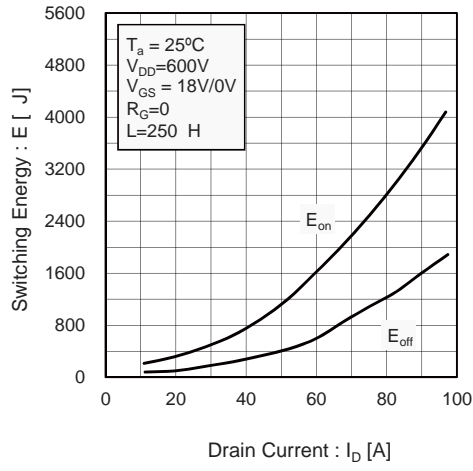


Fig.22 Inverse Diode Forward Current vs. Source - Drain Voltage

Inverse Diode Forward Current :  $I_S$  [A]

Source - Drain Voltage : V

● AYUg i fY a Ybh'W]fw i ]hg

Fig.1-1 Switching Time Measurement Circuit

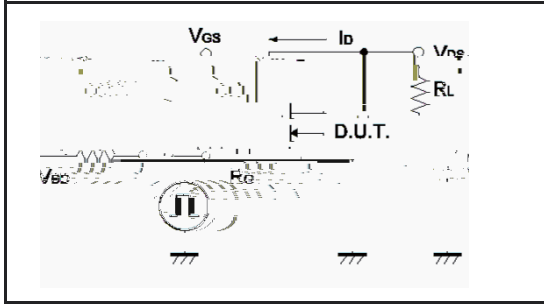


Fig.1-2 Switching Waveforms

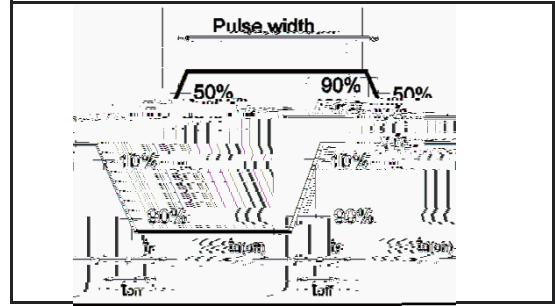


Fig.2-1 Gate Charge Measurement Circuit

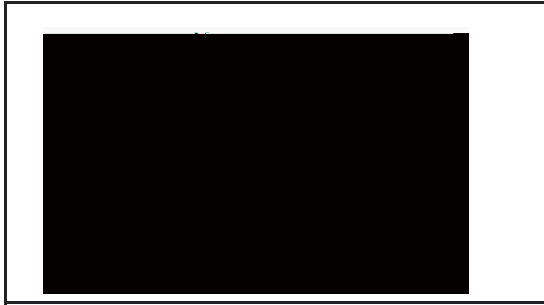


Fig.2-2 Gate Charge Waveform

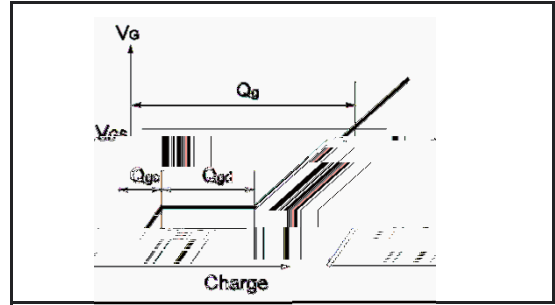


Fig.3-1 Switching Energy Measurement Circuit

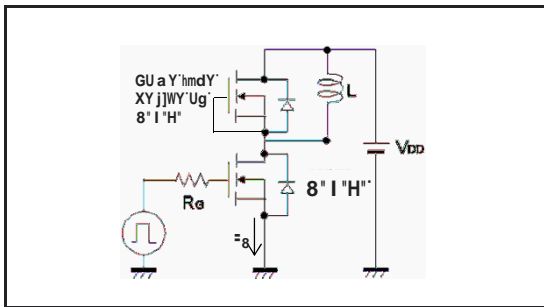


Fig.3-2 Switching Waveforms

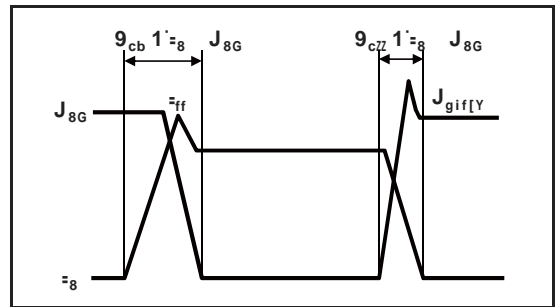


Fig.4-1 Reverse Recovery Time Measurement Circuit

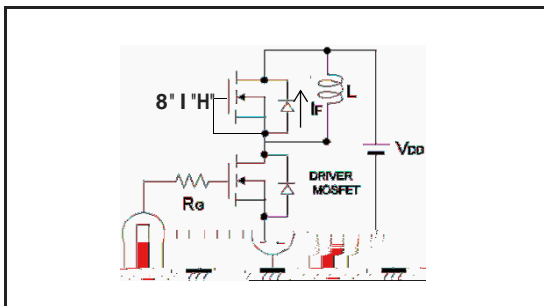


Fig.4-2 Reverse Recovery Waveform

