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

●**Gate Charge characteristics** (T_a = 25°C)

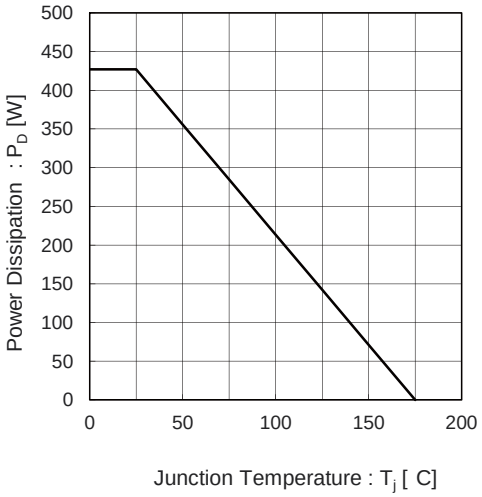
Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Total gate charge	Q_g *3	V_{DD} = 600V	-	178	-	
Gate - Source charge	Q_{gs} *3	I_D = 36A	-	40	-	nC
Gate - Drain charge	Q_{gd} *3	V_{GS} = 18V	-	80	-	
Gate plateau voltage	$V_{(plateau)}$	V_{DD} = 600V, I_D = 36A	-	9.6	-	V

*1 Limited only by maximum temperature allowed.

*2 PW 10 s, Duty cycle 1%

*3 Pulsed

Fig.1 Power Dissipation Derating Curve



D

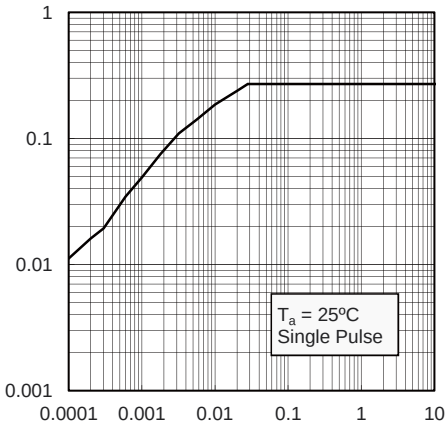
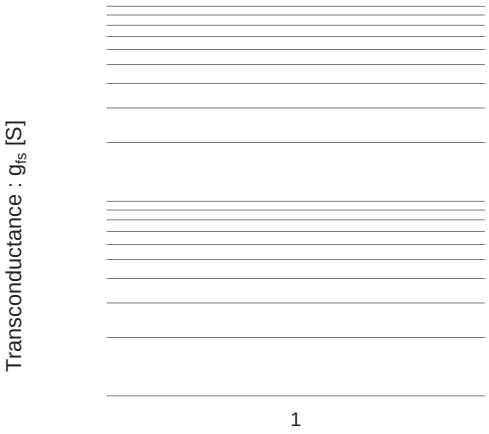


Fig.10 Gate Threshold Voltage vs. Junction Temperature

Junction Temperature : T_j [ºC]

Fig.11 Transconductance vs. Drain Current



Drain Current : I_D [A]

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

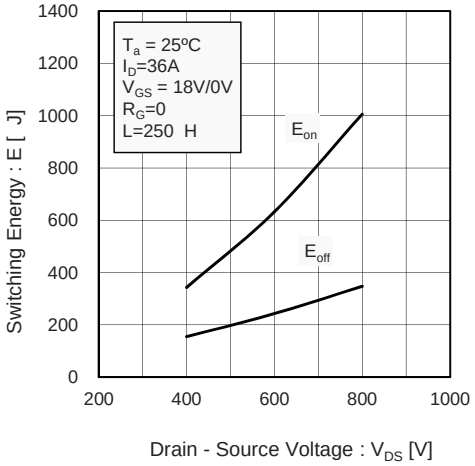


Fig.20 Typical Switching Loss
vs. Drain Current

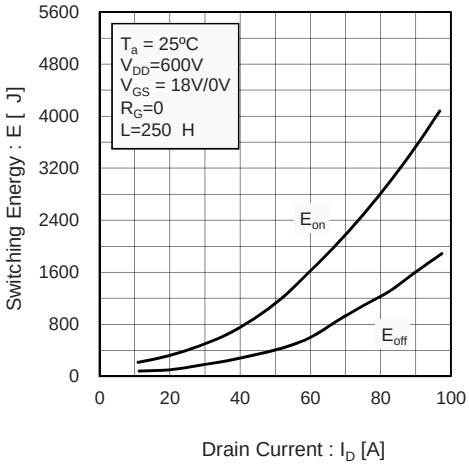


Fig.22 Inverse Diode Forward Current
vs. Source - Drain Voltage

●Measurement circuits

Fig.1-1 Switching Time Measurement Circuit

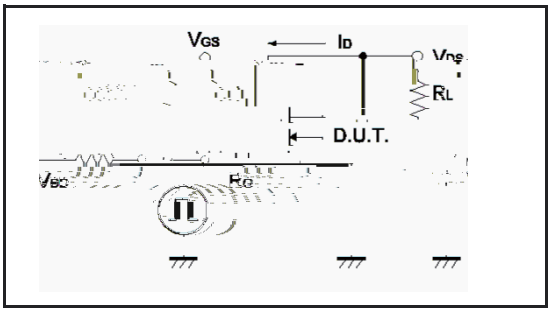


Fig.1-2 Switching Waveforms

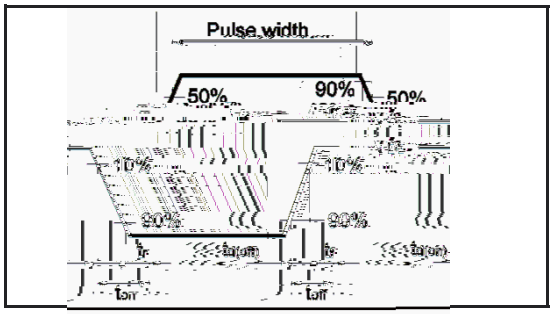


Fig.2-1 Gate Charge Measurement Circuit

Fig.2-2 Gate Charge Waveform

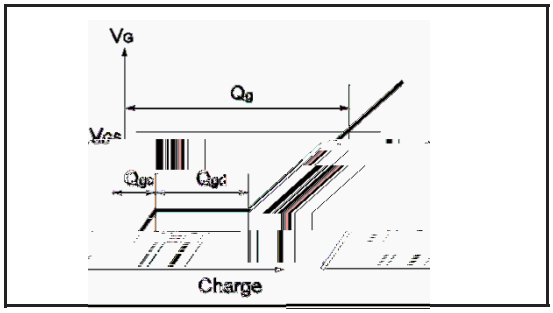


Fig.3-1 Switching Energy Measurement Circuit

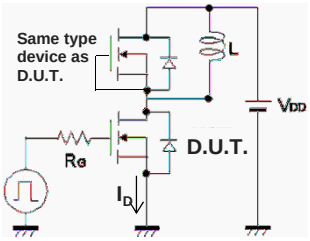


Fig.3-2 Switching Waveforms

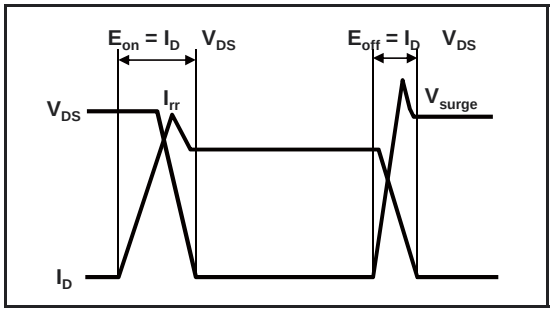


Fig.4-1 Reverse Recovery Time Measurement Circuit

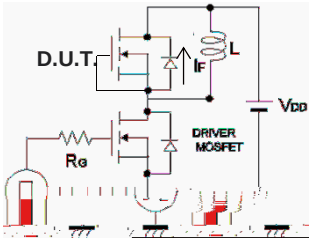


Fig.4-2 Reverse Recovery Waveform