ŏThermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	56	£ C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	180	£ C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	

Pulsed Drain Current	I_{DM}	18	A
Total Power Dissipation	P_D@T_C=25 ł	2.2	W
Total Power Dissipation	P_D@T_A=25 ł	0.69	W
Operating Junction Temperature	T_J	-55 to 150	ł
Storage Temperature	T_{STG}	-55 to 150	ł
Single Pulse Avalanche Energy	E_{AS}	35	mJ

ŏP Channel Absolute Maximum Ratings α

Input capacitance	Ciss	f = 1MHz V_{DS}=25V	-	1150	-	pF
Output capacitance	Coss		-	290	-	
Reverse transfer capacitance	Crss		-			

ŏN Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

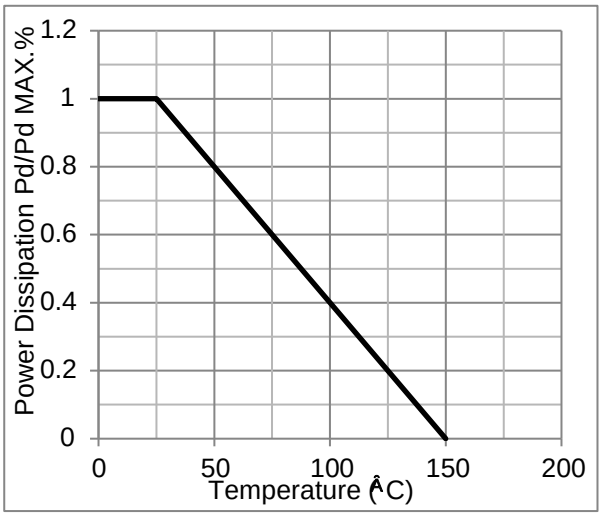


Fig.2 Typical output Characteristics

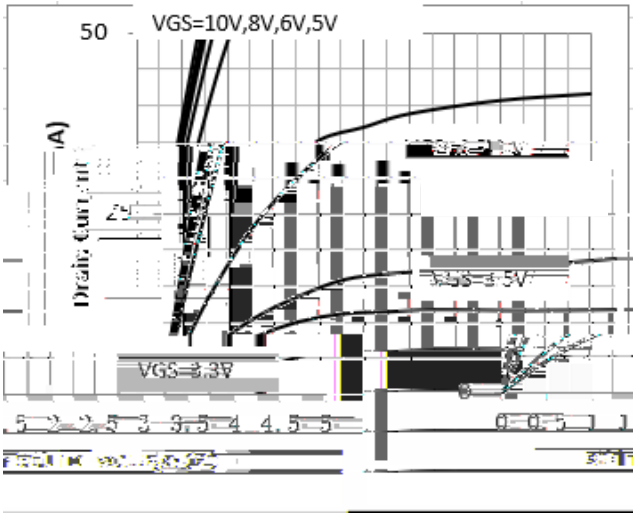


Fig.3 Threshold Voltage V.S Junction Temperature

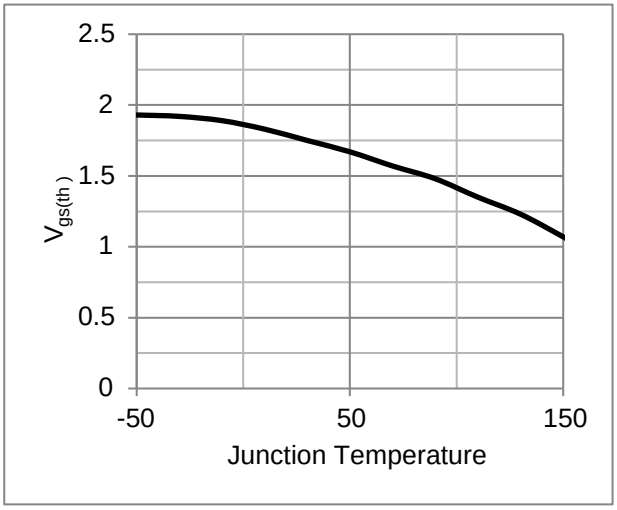


Fig.4 Resistance V.S Drain Current

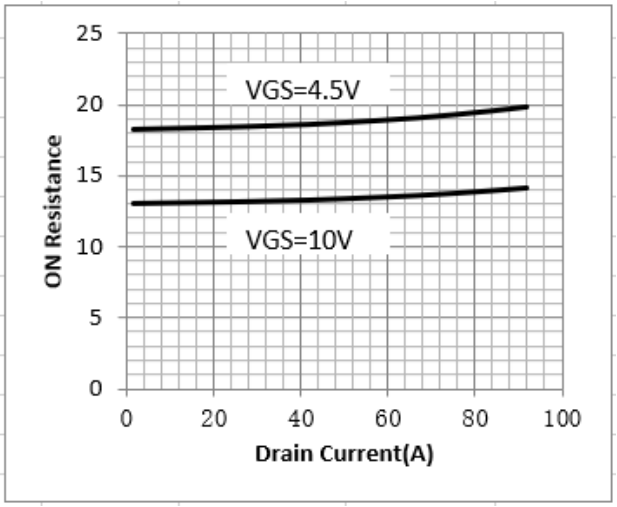


Fig.5 On-Resistance VSGate Source Voltage

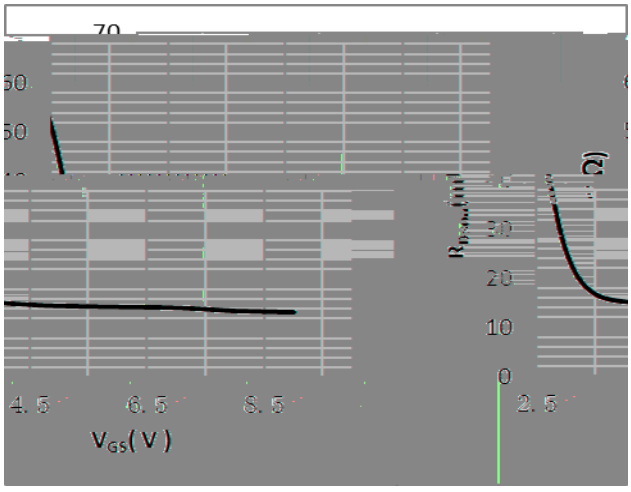
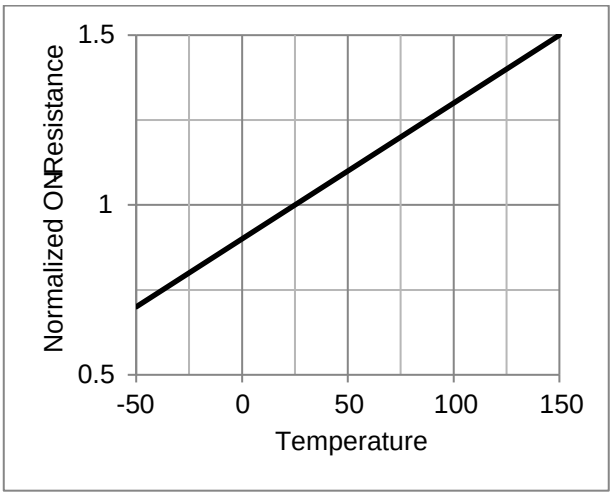


Fig.6 On-Resistance V.S Junction Temperature



ŏP Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

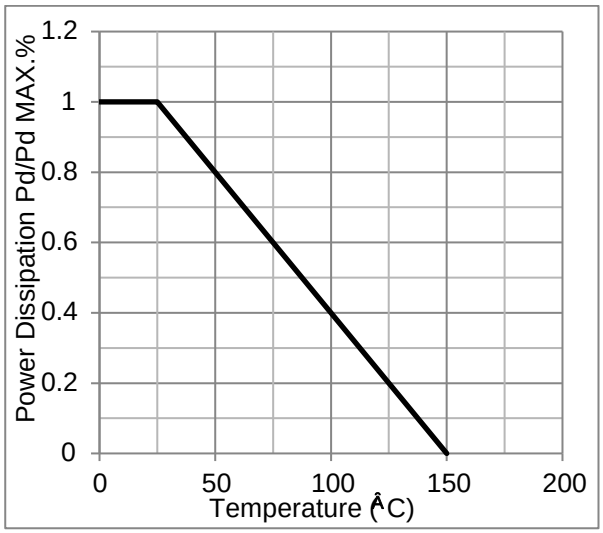


Fig.2 Typical output Characteristics

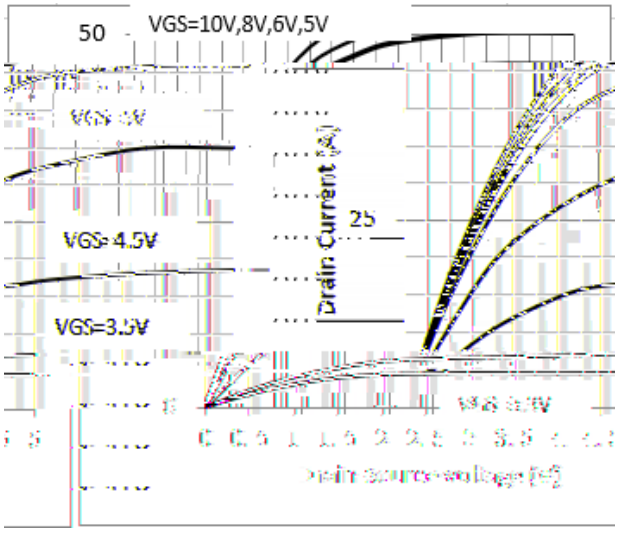


Fig.3 Threshold Voltage V.S Junction Temperature

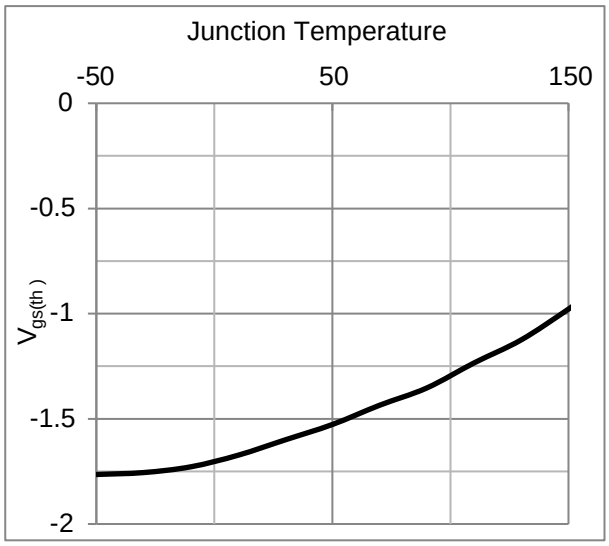


Fig.4 Resistance V.S Drain Current

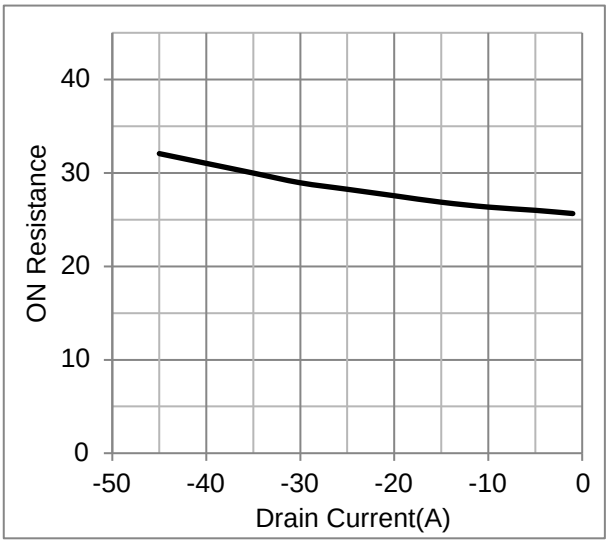


Fig.5 On-Resistance VSGate Source Voltage

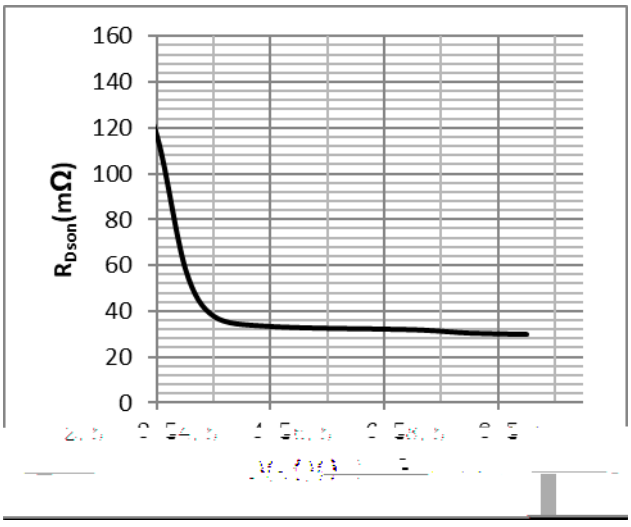
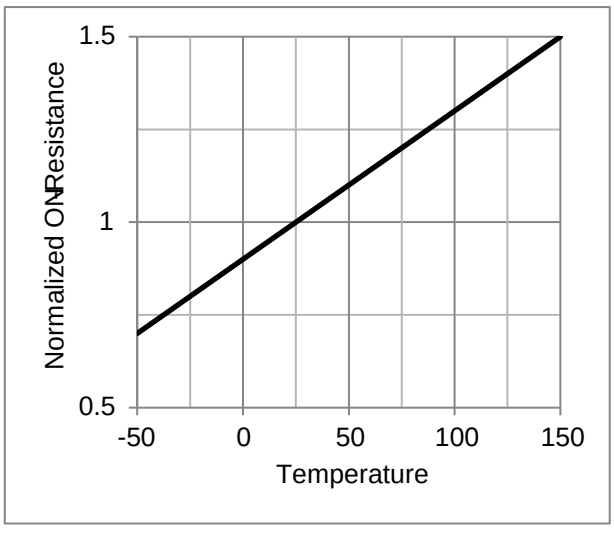


Fig.6 On-Resistance V.S Junction Temperature



ŏTest Circuit

Fig.1 Switching Time Measurement Circuit

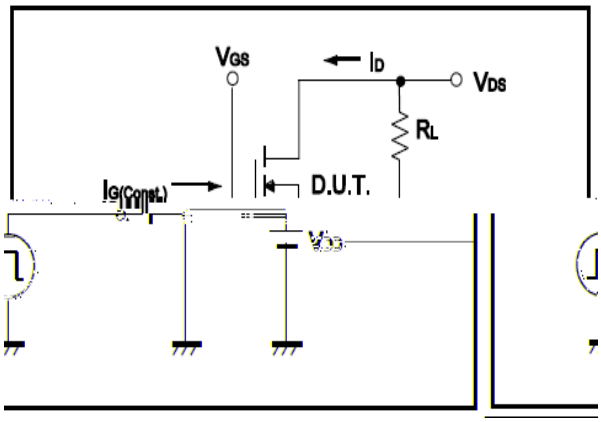


Fig.2 Gate Charge Waveform

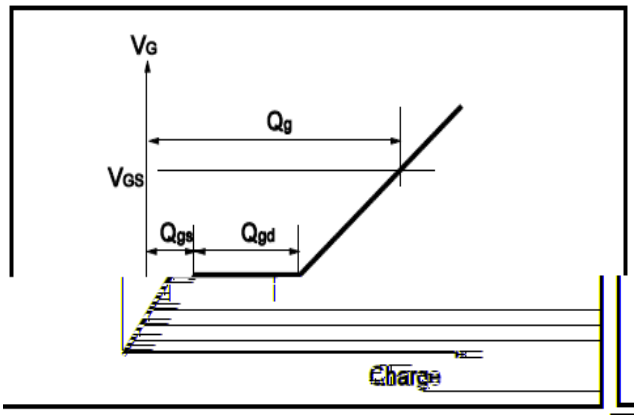


Fig.3 Switching Time Measurement Circuit

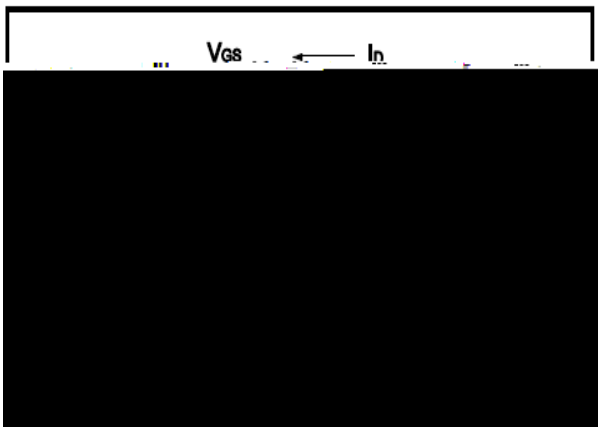


Fig.4 Gate Charge Waveform

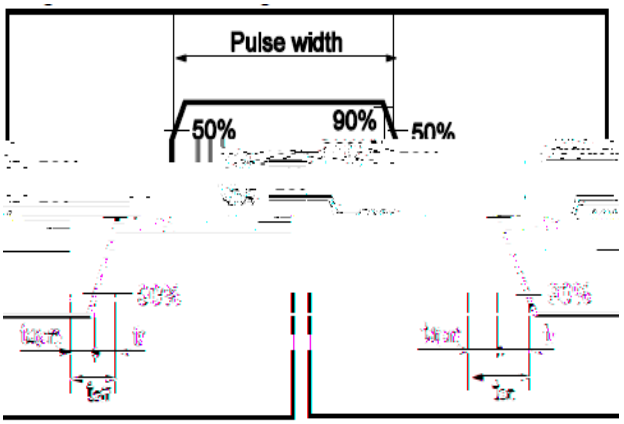


Fig.5 Avalanche Measurement Circuit

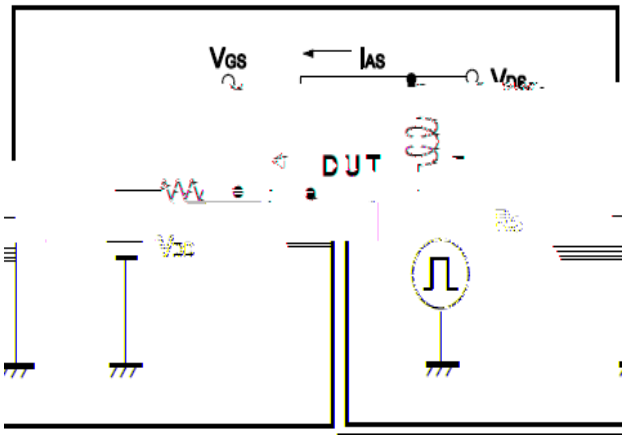


Fig.6 Avalanche Waveform