

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	2.3	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	62	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

N Channel Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	20	V
Continuous Drain Current	$I_D @ T_C = 25^\circ C$	25	A
	$I_D @ T_C = 75^\circ C$	19	A
	$I_D @ T_C = 100^\circ C$	15	A



Pulsed Drain Current ^④

I_{DM}

50

N Channel characteristics curve

Fig.1 Power Dissipation

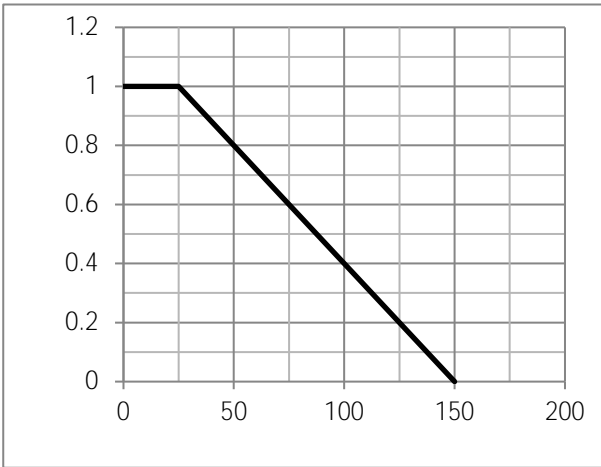


Fig.2 Typical output Characteristics

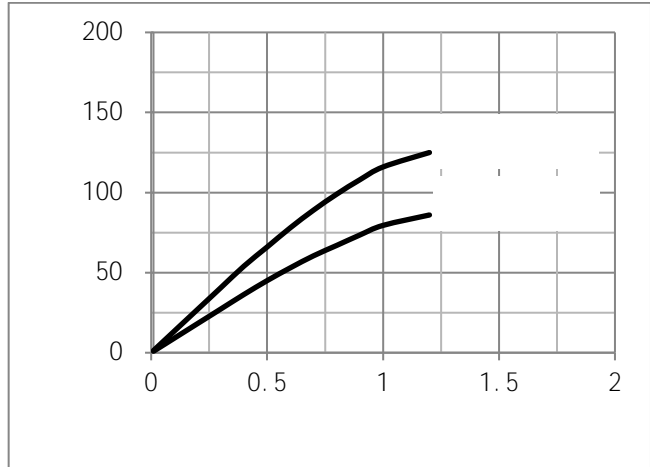


Fig.3 Threshold Voltage V.S Junction Temperature

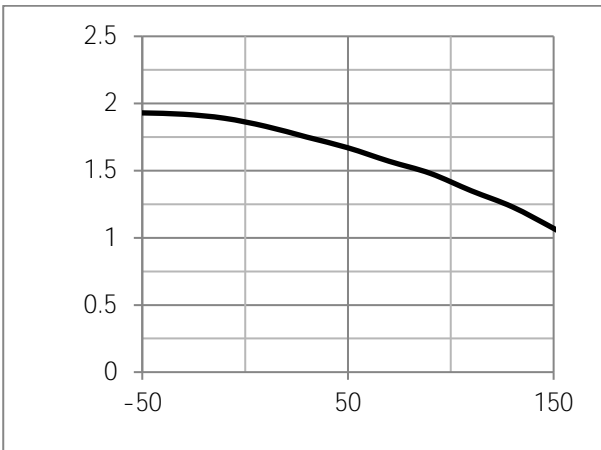
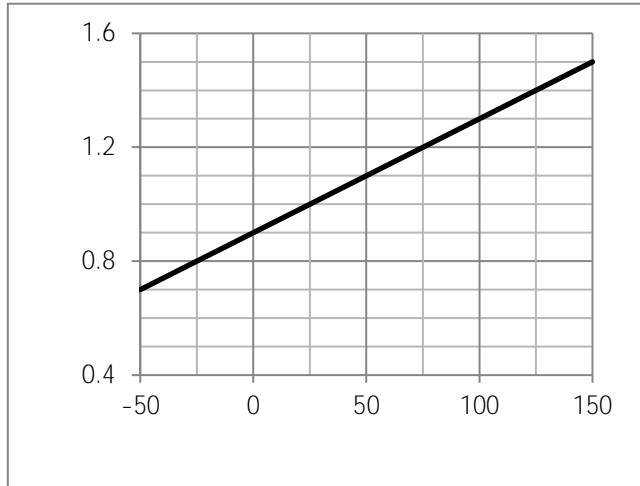
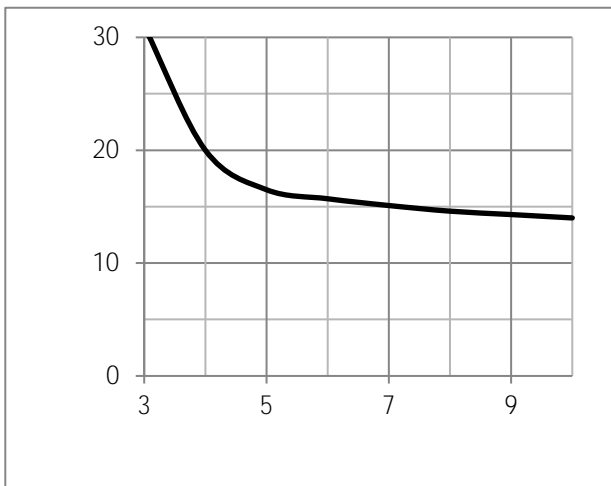
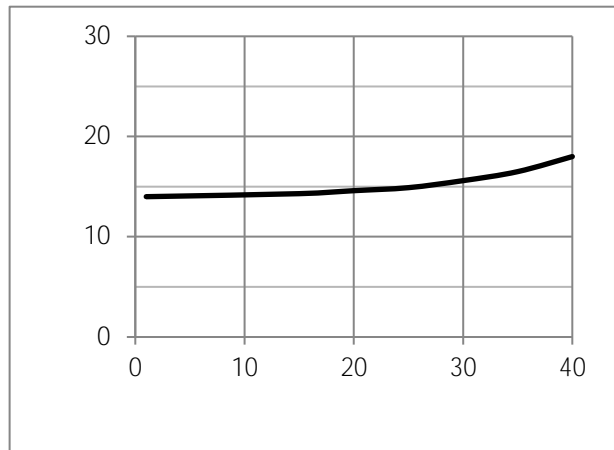


Fig.4 Resistance V.S Drain Current



P Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

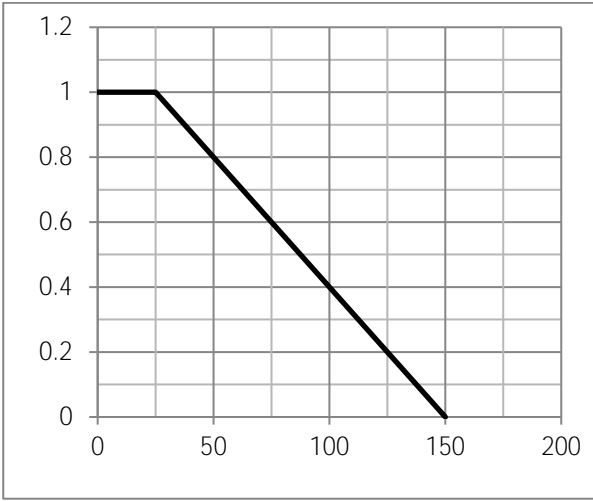


Fig.2 Typical output Characteristics

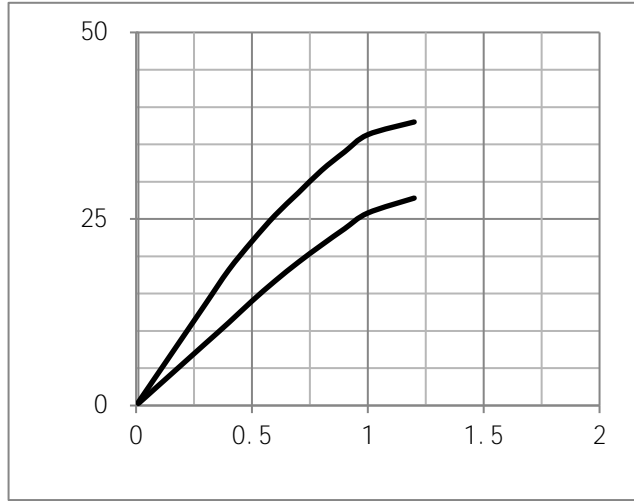


Fig.3 Threshold Voltage V.S Junction Temperature

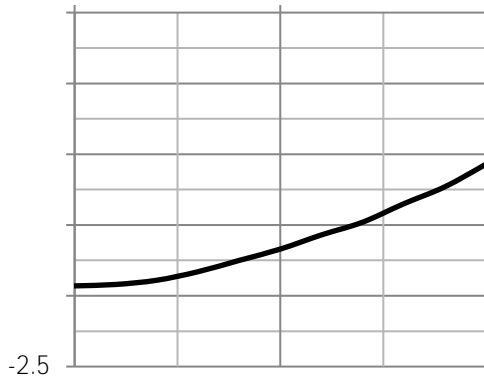


Fig.4 Resistance V.S Drain Current

Test Circuit

Fig.1 Switching Time Measurement Circuit

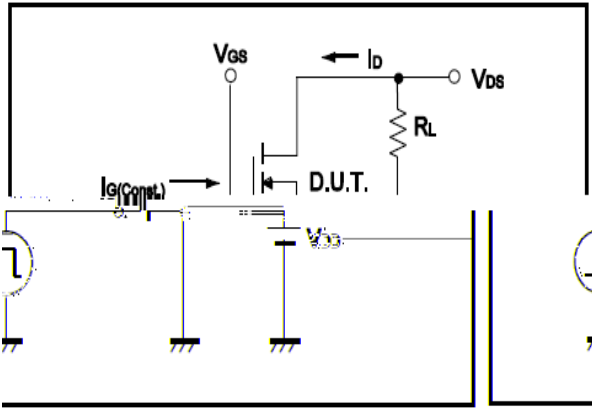


Fig.2 Gate Charge Waveform

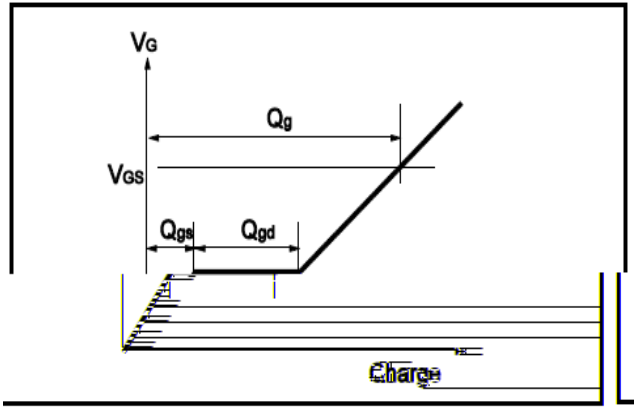


Fig.3 Switching Time Measurement Circuit

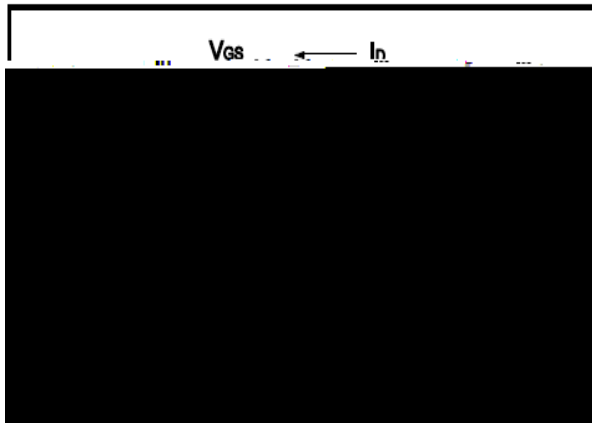


Fig.4 Gate Charge Waveform

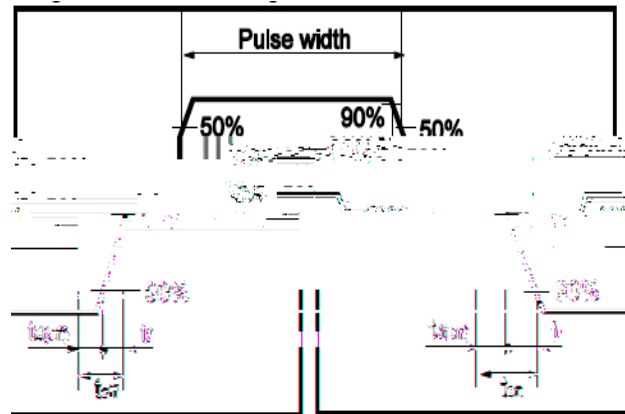


Fig.5 Avalanche Measurement Circuit

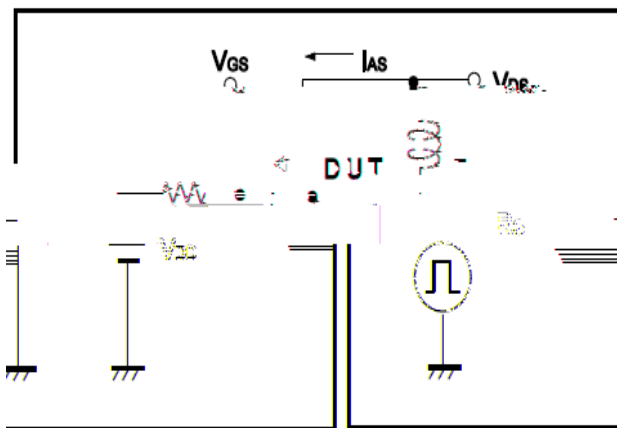
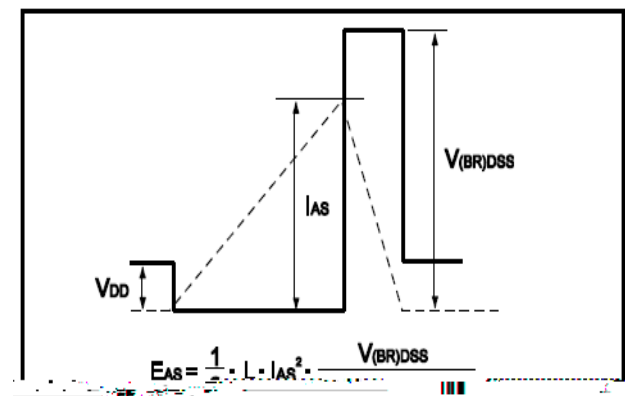


Fig.6 Avalanche Waveform





(TO-252-4)

Unit: mm

