



The ZMC88404D combines advanced trench
MOSFET combines

N Channel Absolute Maximum Ratings $T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Gate-Source Voltage	V_{GS}	20	V
Continuous Drain Current($T_C=25$)	I_D	25	A
Pulsed Drain Current	I_{DM}	60	A
Total Power Dissipation($T_C=25$)	$P_D@T_C=25$	50	W
Total Power Dissipation($T_A=25$)	$P_D@T_A=25$	2.0	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy	E_{AS}	35	mJ

**Gate Charge characteristics($T_a = 25$)**

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	Qg	$V_{DD} = 25V$	-	10	-	
Gate - Source charge	Qgs	$I_D = 6A$ $V_{GS} = 10V$	-	4		nC



N Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

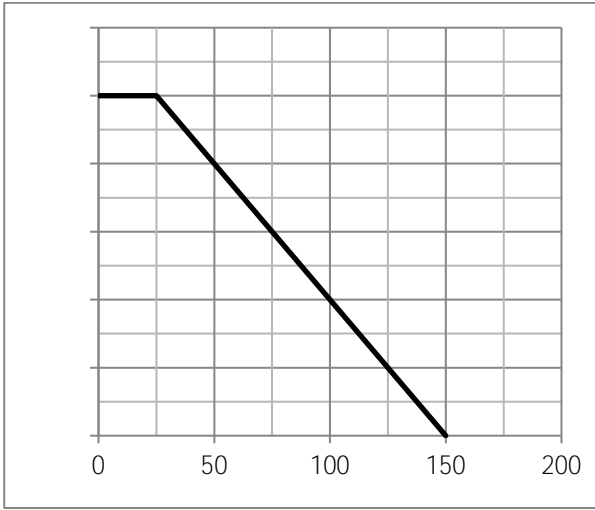


Fig.2 Typical output Characteristics

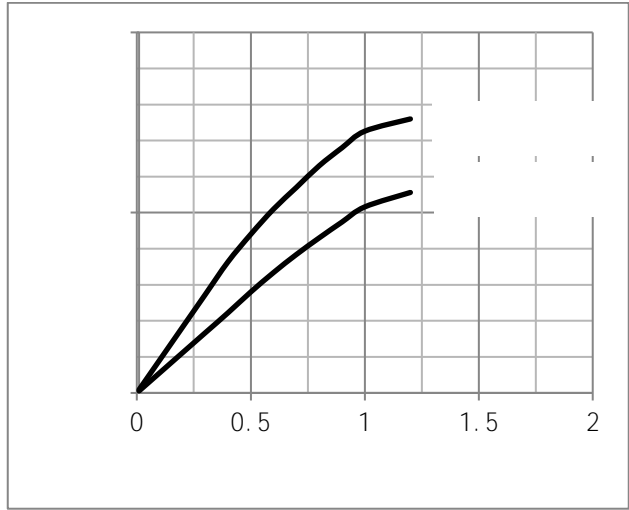


Fig.3 Threshold Voltage V.S Junction Temperature

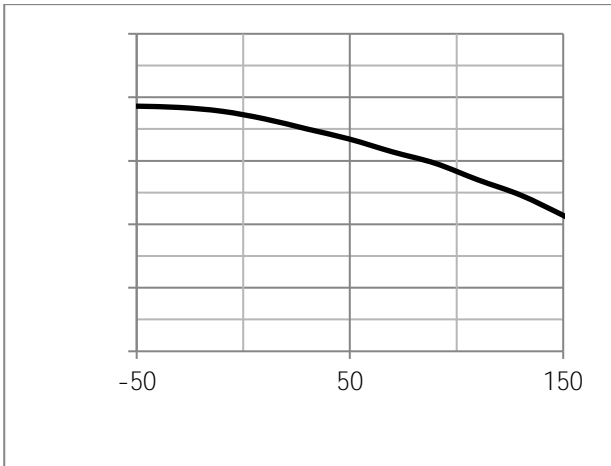
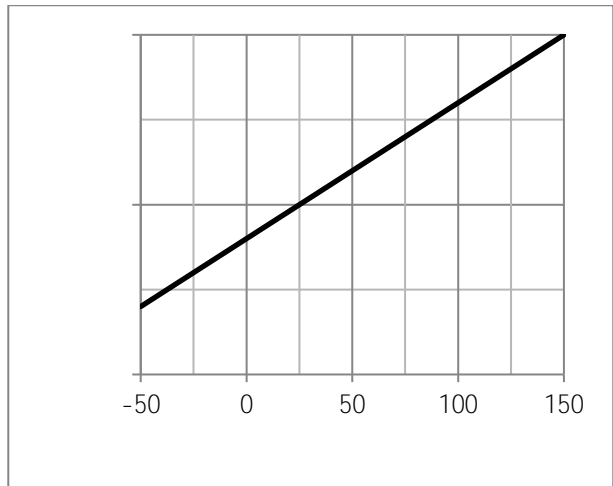
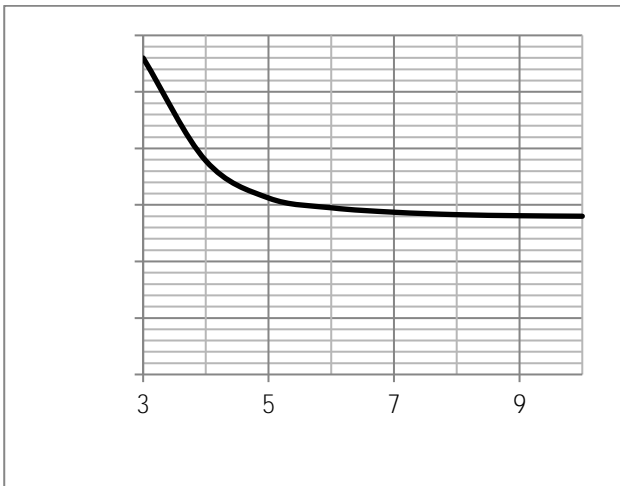
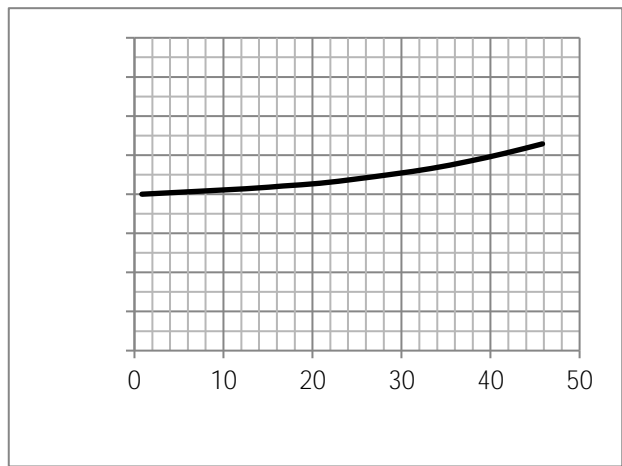


Fig.4 Resistance V.S Drain Current





Test Circuit

Fig.1 Switching Time Measurement Circuit

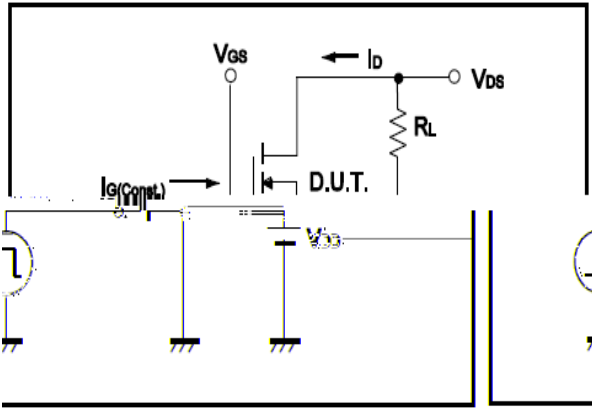


Fig.2 Gate Charge Waveform

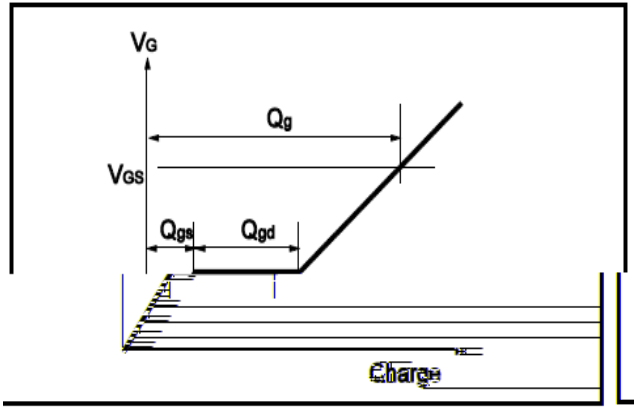


Fig.3 Switching Time Measurement Circuit

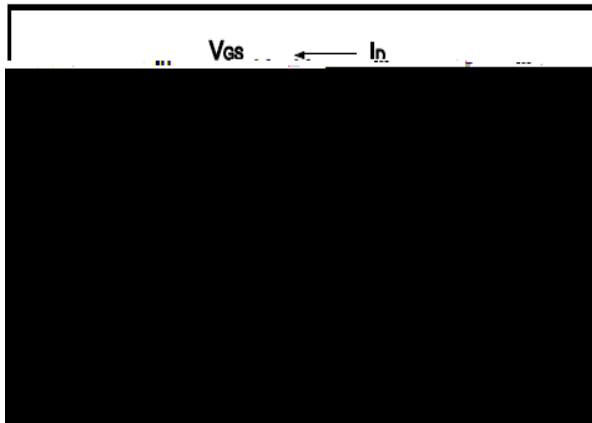


Fig.4 Gate Charge Waveform

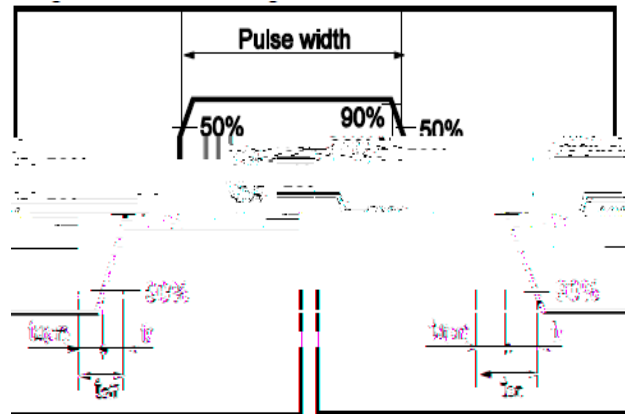


Fig.5 Avalanche Measurement Circuit

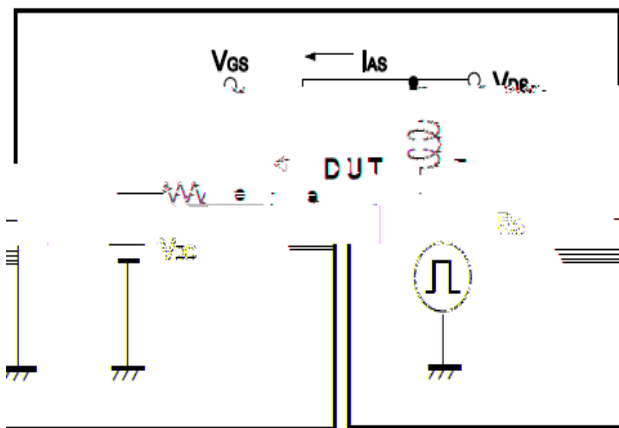
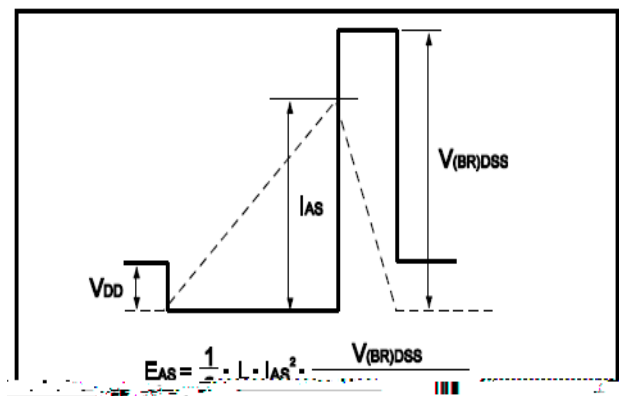


Fig.6 Avalanche Waveform





(TO-252-4)

Unit: mm

