

Key Features

The ZMC88601S combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. It combine one N Channel MOSFET and one P channel MOSFET.

Low $R_{DS(ON)}$ Technology

Advanced trench MOSFET technology
 to minimize conductive loss
 Dual DIE in one package

Product Summary

$V_{DS1} = 60V$
 $V_{DS2} = -60V$
 $R_{DS(ON)}$

Applications

Power Management in Notebook Computer
 BLDC Motor driver

Ordering Information
N Channel Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	4.5	A
Pulsed Drain Current	I_{DM}	13	A
Total Power Dissipation	$P_D@TC=25$	3.4	W
Total Power Dissipation	$P_D@TA=25$	0.69	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	



P Channel Absolute Maximum Ratings $T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-60	V
	V_{GS}	± 20	V
Continuous Drain Current($T_C=25$)	I_D	-4.0	A

N Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

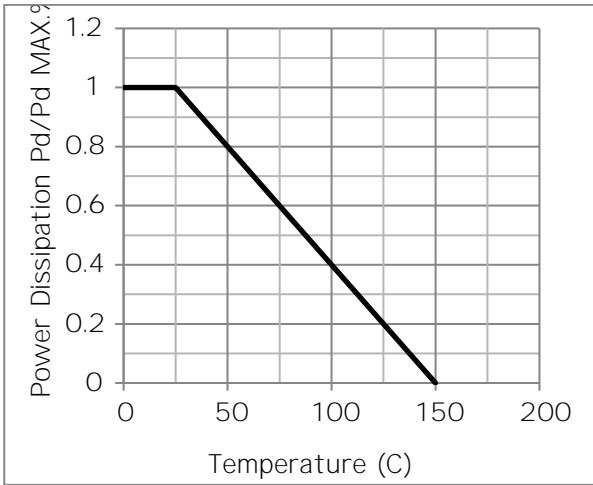


Fig.2 Typical output Characteristics

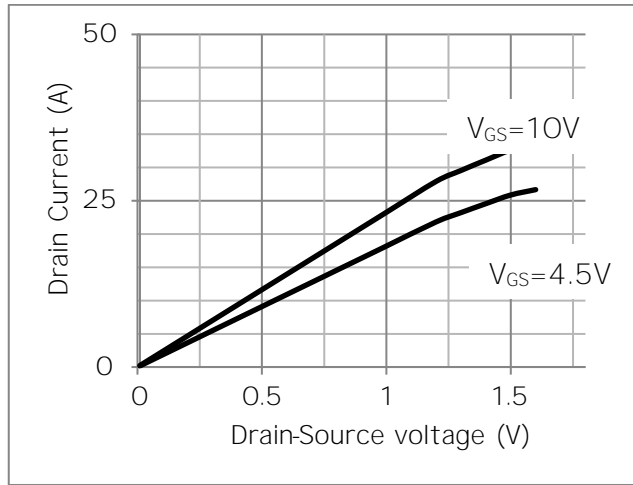


Fig.3 Threshold Voltage V.S Junction Temperature

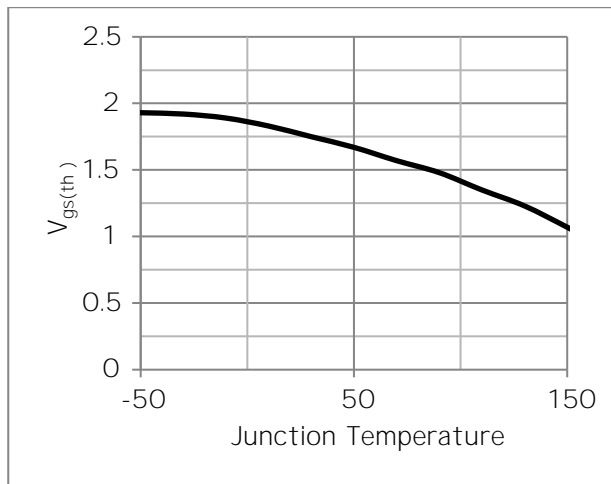


Fig.4 Resistance V.S Drain Current

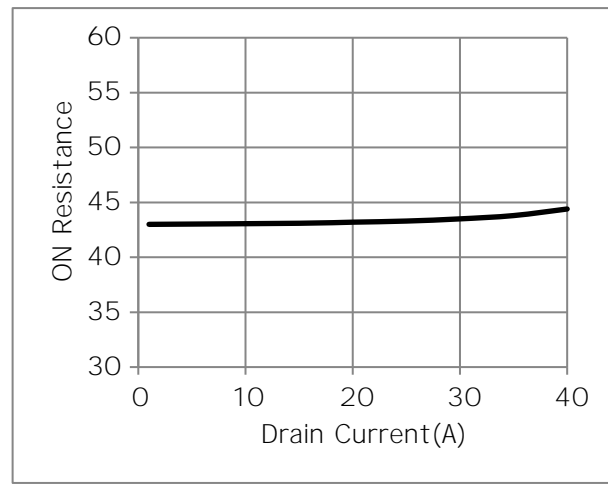


Fig.5 On-Resistance VGS Gate Source Voltage

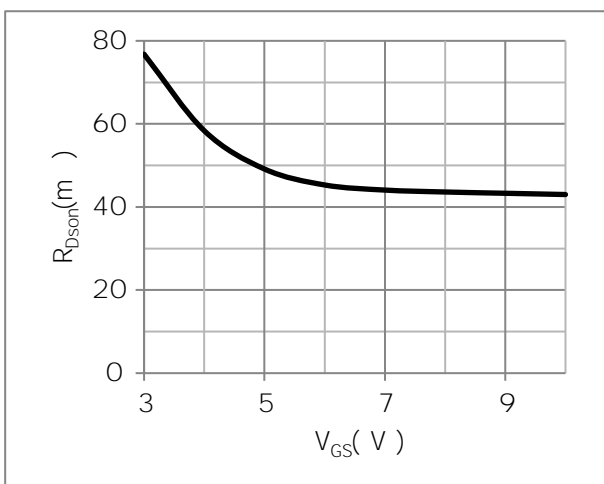
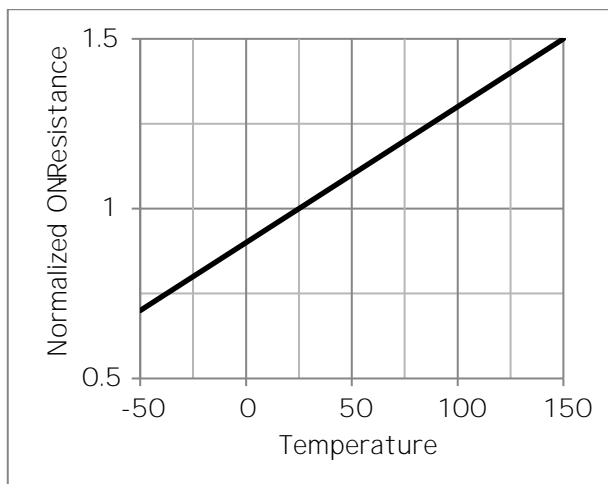


Fig.6 OnResistance V.S Junction Temperature



Test Circuit

Fig.1 Switching Time Measurement Circuit

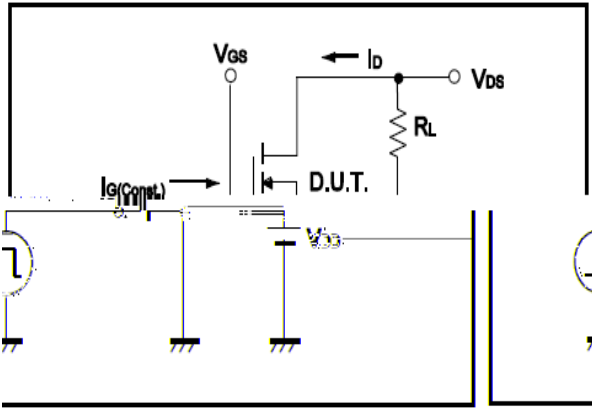


Fig.2 Gate Charge Waveform

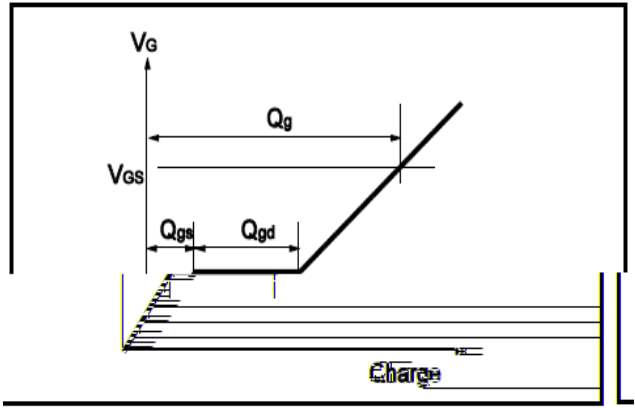


Fig.3 Switching Time Measurement Circuit

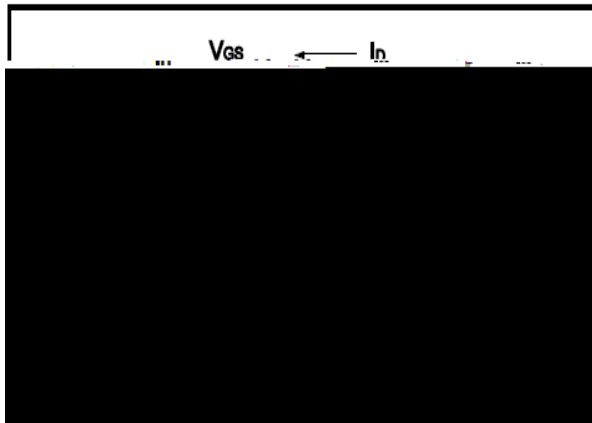


Fig.4 Gate Charge Waveform

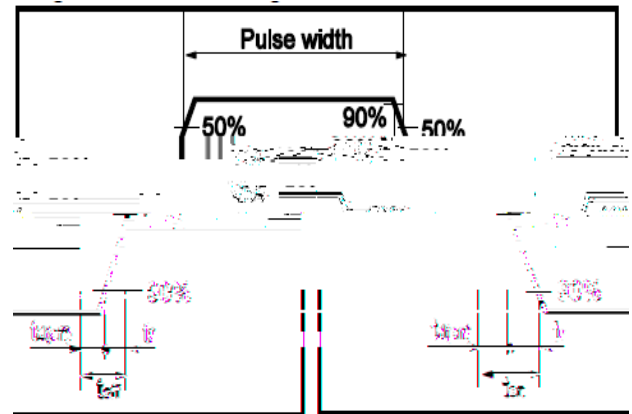


Fig.5 Avalanche Measurement Circuit

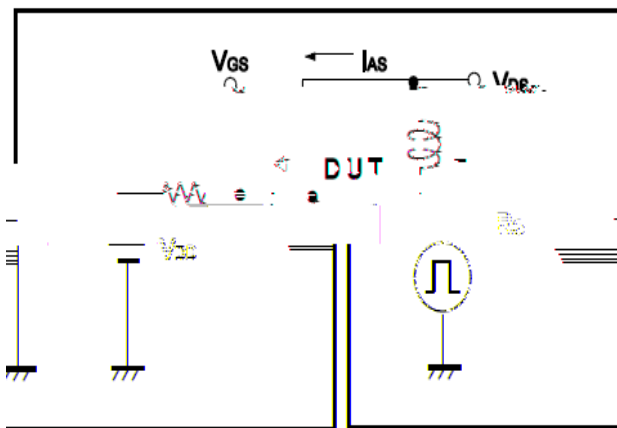
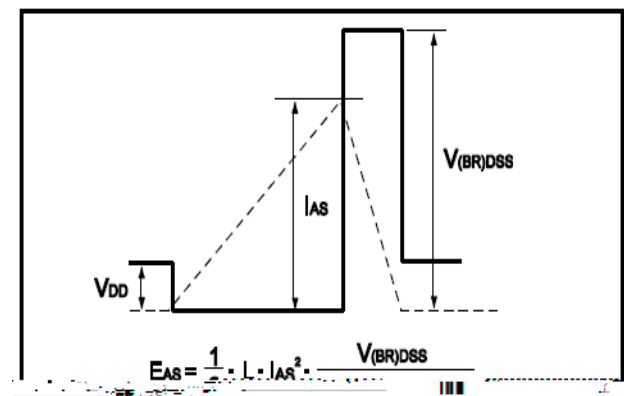


Fig.6 Avalanche Waveform





8] a Y b g (SOEP) g

Unit: mm

SYMBOL	min	TYP	max	SYMBOL	min		max
A	4.80		5.00	C	1.30		1.50