ŏ General Description

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.

ŏ Product Summary

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

ŏ Features

- Advance density Trench technology
- Low $R_{DS(ON)}$ to minimize conductive loss
- Low Gate Charge for fast
- Dual DIE in one package

ŏ Application

- Power Management in Notebook Computer
- BLDC Motor driver

ŏ Ordering Information:

ŏN Channel Absolute Maximum Ratings α T_C =25 ɹ β

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

ŏP Channel Absolute Maximum Ratings α T_C =25 ɹ β

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

ŏN Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

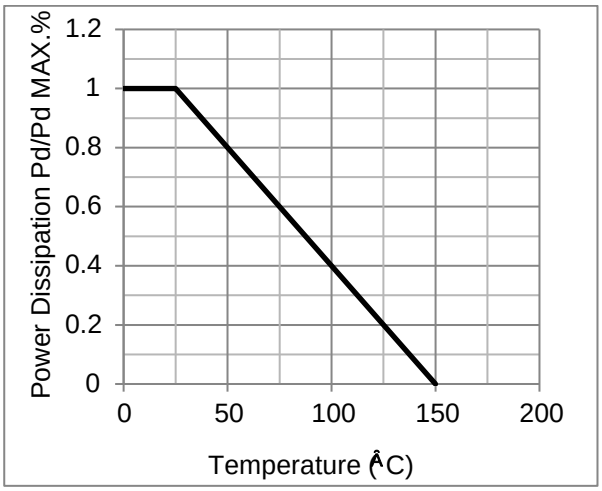


Fig.2 Typical output Characteristics

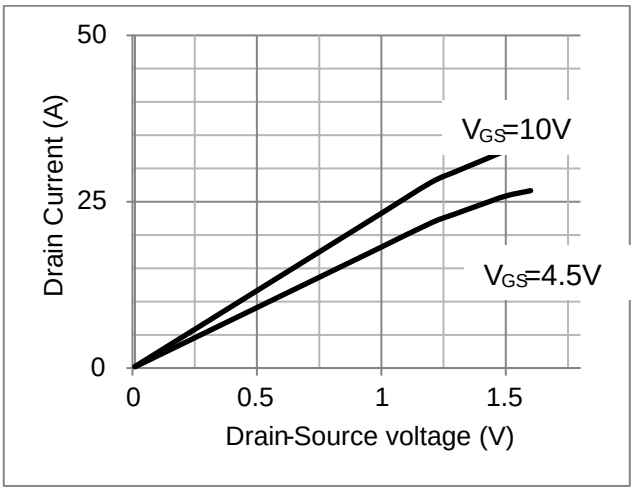


Fig.3 Threshold Voltage V.S Junction Temperature

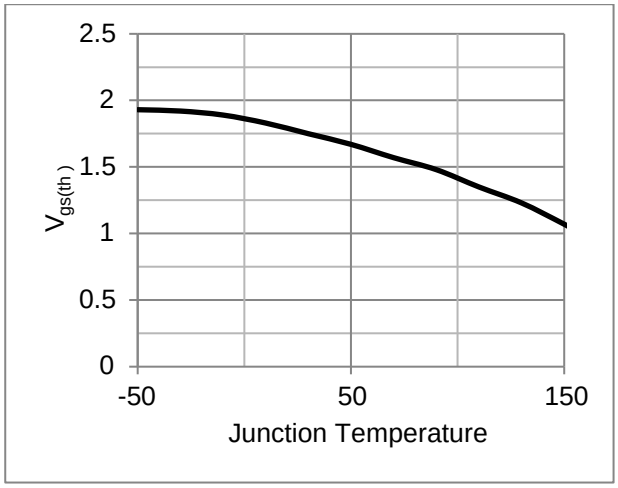


Fig.4 Resistance V.S Drain Current

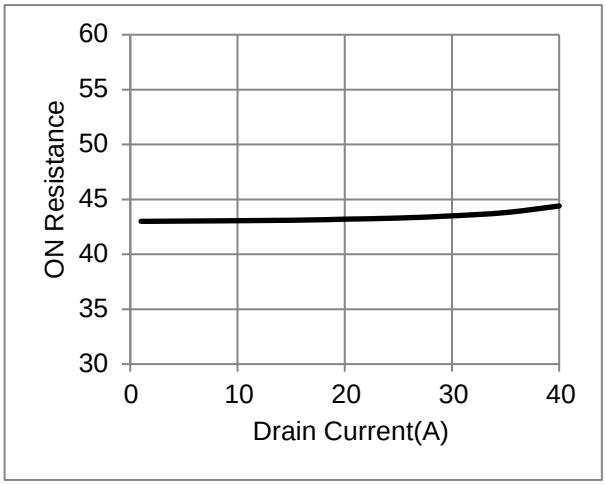


Fig.5 On-Resistance VSGate Source Voltage

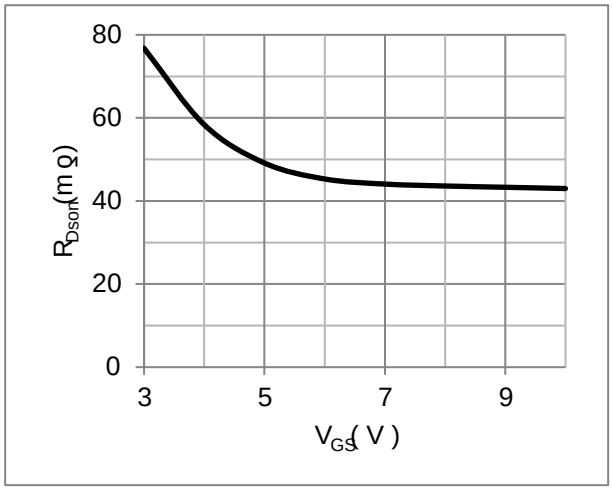
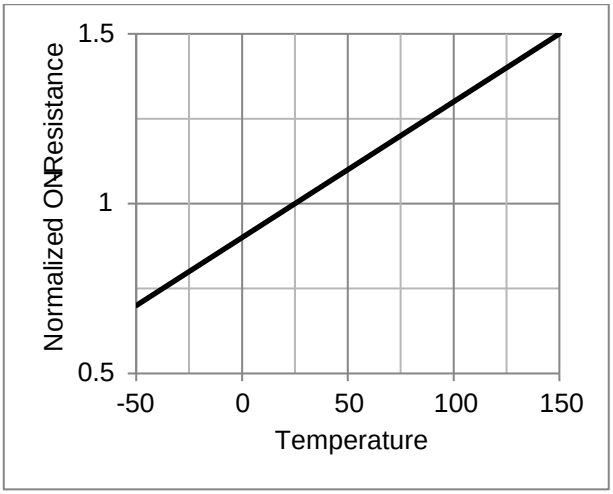


Fig.6 On-Resistance V.S Junction Temperature



ŏTest Circuit

Fig.1 Switching Time Measurement Circuit

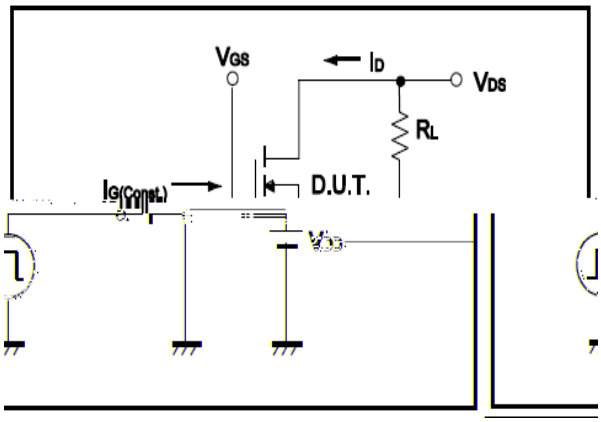


Fig.2 Gate Charge Waveform

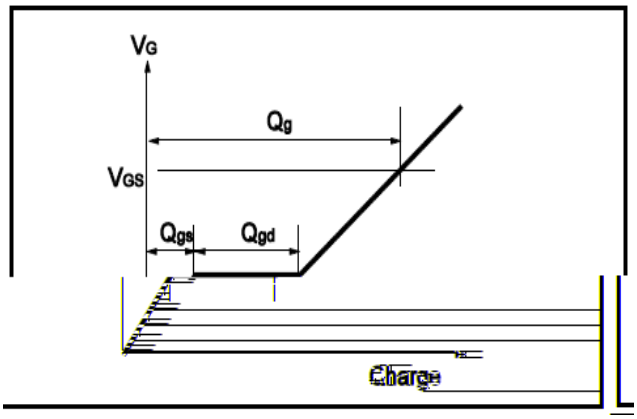


Fig.3 Switching Time Measurement Circuit

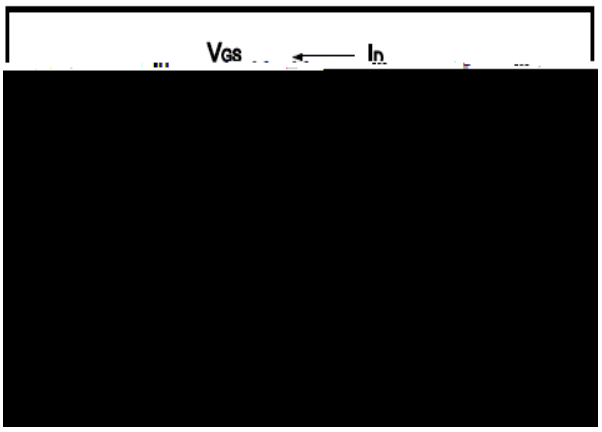


Fig.4 Gate Charge Waveform

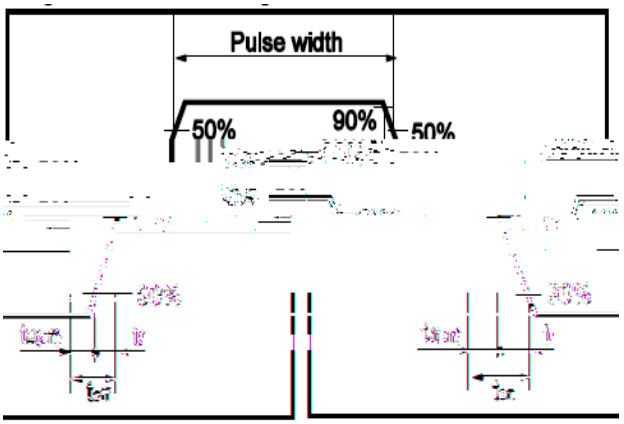


Fig.5 Avalanche Measurement Circuit

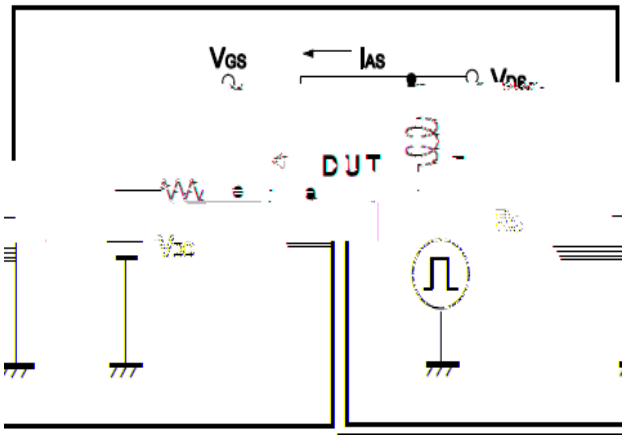
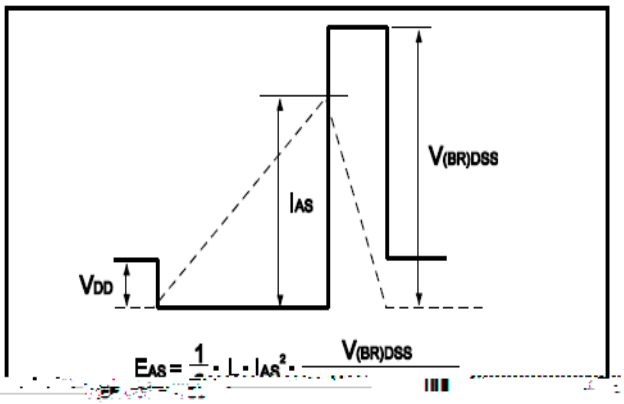


Fig.6 Avalanche Waveform



ð Di me n s(SOP8) s

Unit: mm

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