

General Description

The ZMD68601S combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.

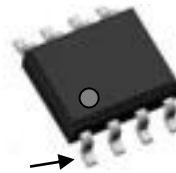
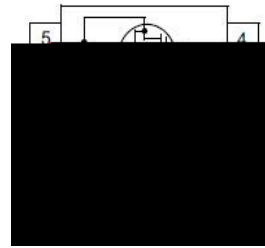
Features

Trench technology
 $R_{DS(ON)}$ to minimize conductive loss

Dual DIE in one package

Application

Power Management in Notebook Computer,
 Portable Equipment and Battery Powered
 Systems

Product Summary

Ordering Information:

Part NO.	ZMD68601S
Marking	ZMD68601
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

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	$I_D @ T_C = 25$	6.5	A
	$I_D @ T_C = 75$	5.0	A
	$I_D @ T_C = 100$	4.0	A
Pulsed Drain Current	I_{DM}	19.5	A
Total Power Dissipation	$P_D @ T_C = 25$	3.6	W
Total Power Dissipation	$P_D @ T_A = 25$	0.69	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy	E_{AS}	90	mJ

Fig.1 Power Dissipation

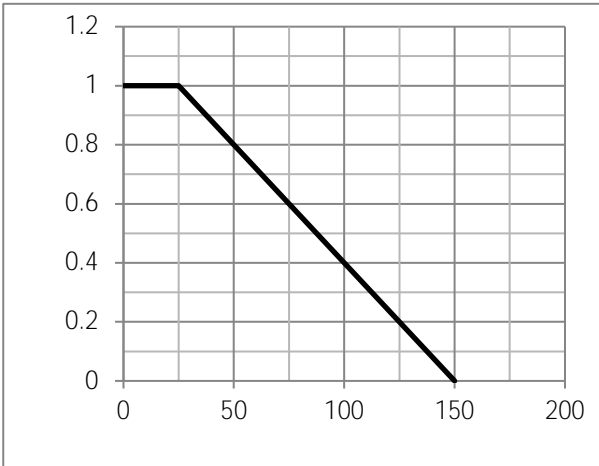


Fig.2 Typical output Characteristics

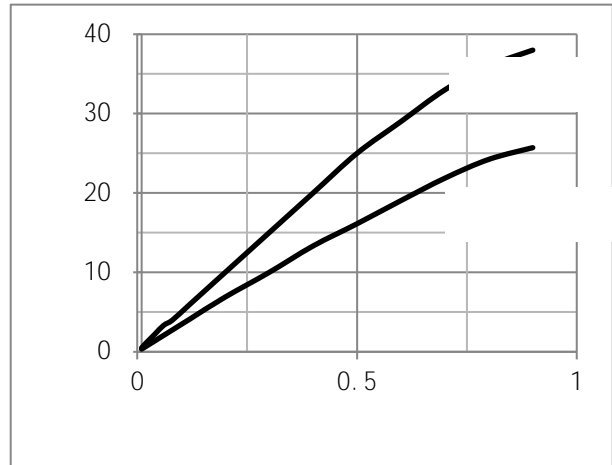


Fig.3 Threshold Voltage V.S Junction Temperature

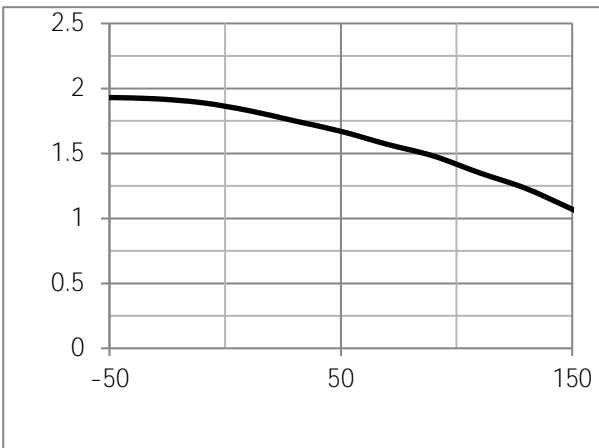


Fig.4 Resistance V.S Drain Current

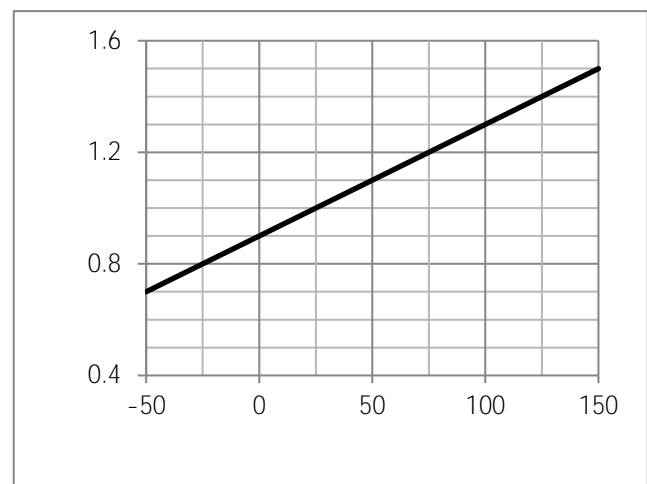
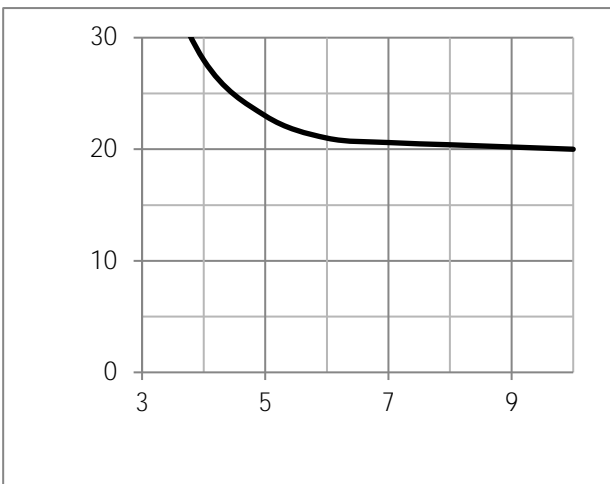
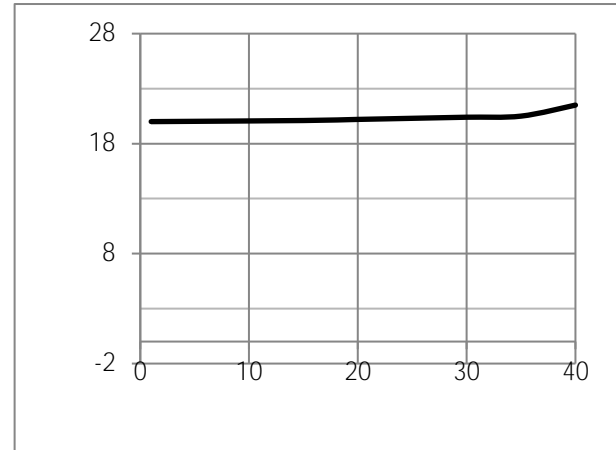


Fig.7 Switching Time Measurement Circuit

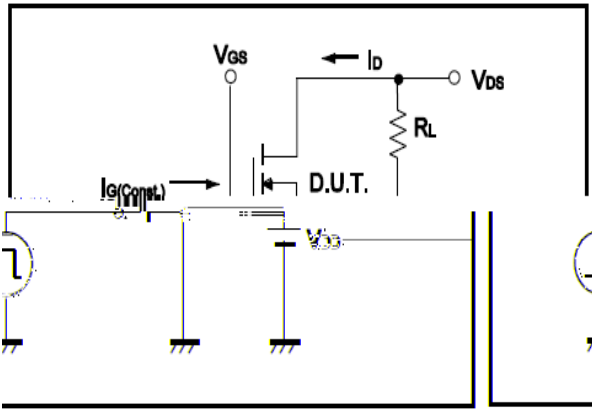


Fig.8 Gate Charge Waveform

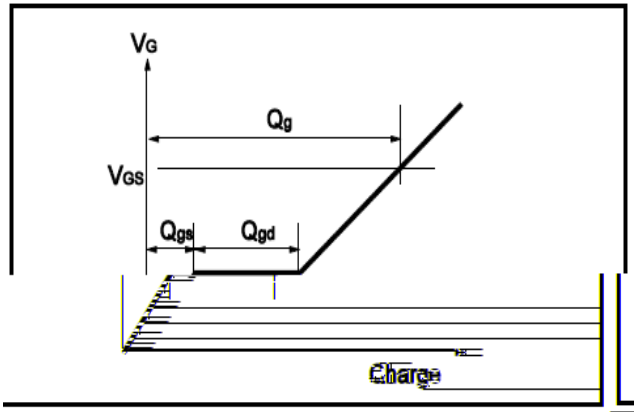


Fig.9 Switching Time Measurement Circuit

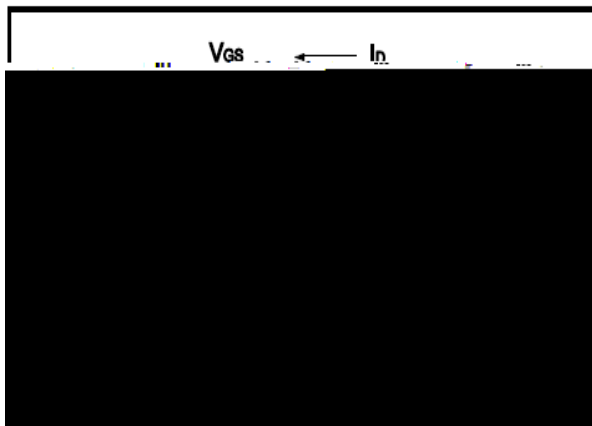


Fig.10 Gate Charge Waveform

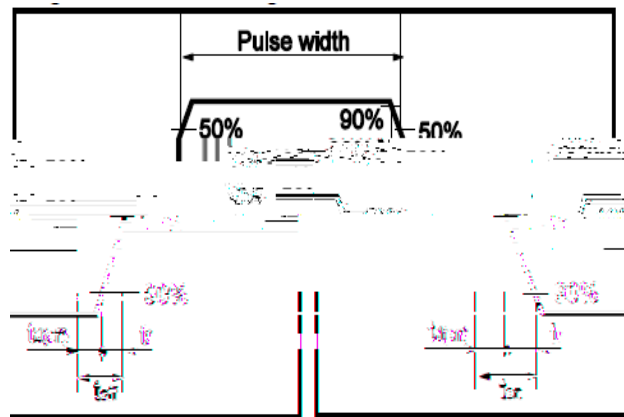


Fig.11 Avalanche Measurement Circuit

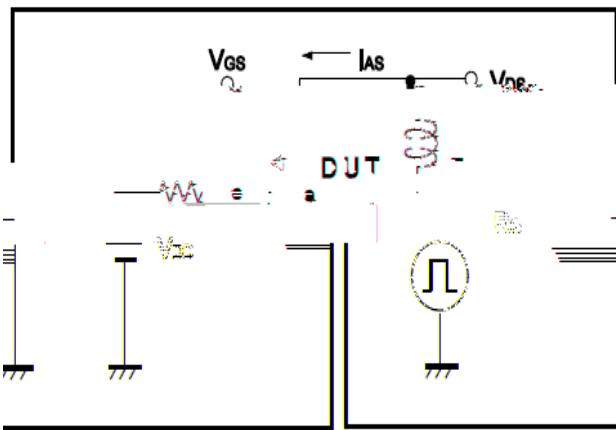


Fig.12 Avalanche Waveform

