

**Key Features**

The ZMD68101S combines advanced trench MOSFET technology with a low resistance package to provide extremely low  $R_{DS(ON)}$ .

**Low  $R_{DS(ON)}$** 

Advanced trench MOSFET technology to minimize conductive loss

Dual DIE in one package

**Applications**

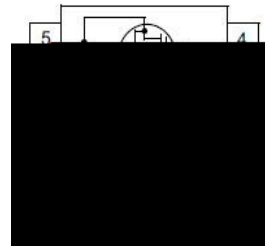
Power Management in Notebook Computer,  
 Portable Equipment and Battery Powered  
 Systems

**Product Information**

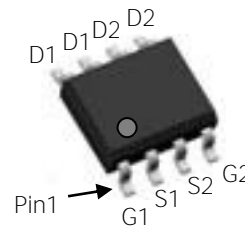
Part NO.	ZMD68101S
Marking	ZMD68101
Packing Information	REEL TAPE
Basic ordering unit (pcs)	4000

**Electrical Characteristics**

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	100	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_{D@TC=25}$	4	A
	$I_{D@TC=75}$	3	A
	$I_{D@TC=100}$	2.5	A
Pulsed Drain Current	$I_{DM}$	15	A
Total Power Dissipation	$P_D@TC=25$	3	W
Total Power Dissipation	$P_D@TA=25$	1.6	W
Operating Junction Temperature	$T_J$	-55 to 150	
Storage Temperature	$T_{STG}$	-55 to 150	
Single Pulse Avalanche Energy	$E_{AS}$	5	mJ

**Product Summary**


$V_{DS1} = 100V$   
 $V_{DS2} = 100V$   
 $R_{DS(ON)1} = 80m\Omega$   
 $R_{DS(ON)2} = 80m\Omega$   
 $I_{D1} = 4A$   
 $I_{D2} = 4A$



SOP8





Fig.1 Power Dissipation Derating Curve

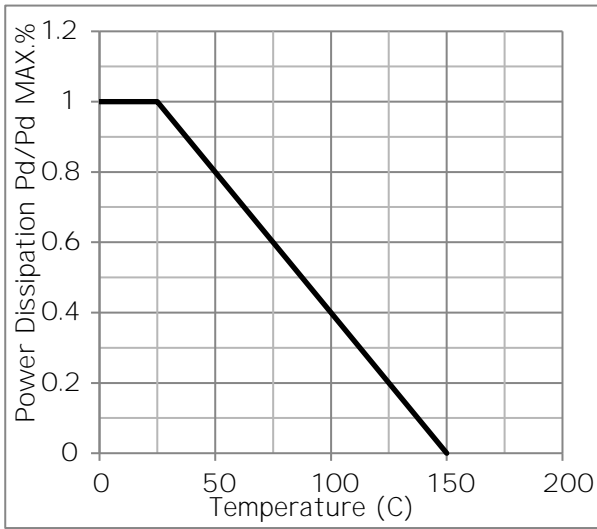


Fig.2 Typical output Characteristics

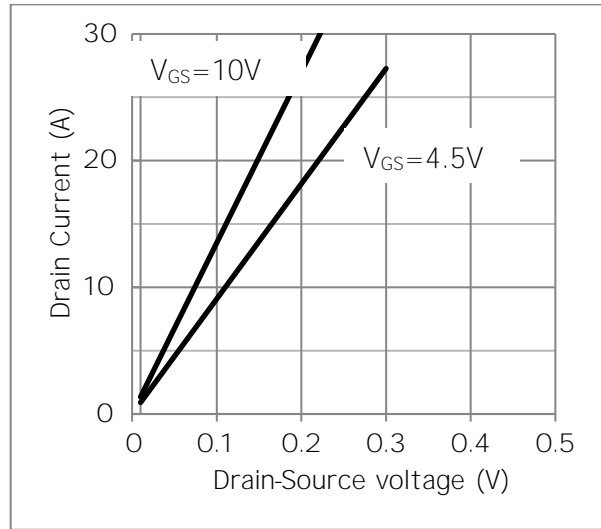


Fig.3 Threshold Voltage V.S Junction Temperature

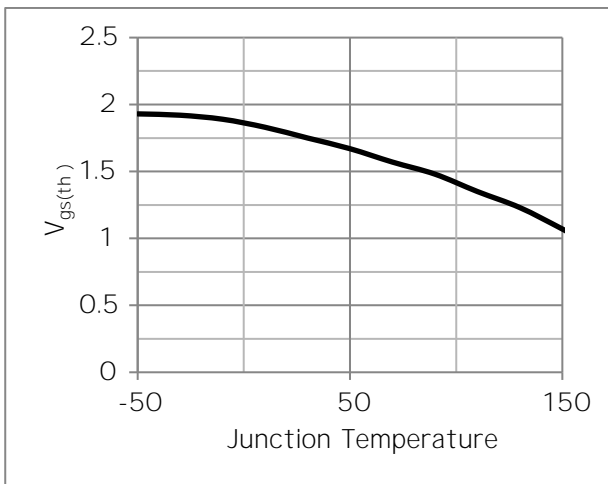


Fig.4 Resistance V.S Drain Current

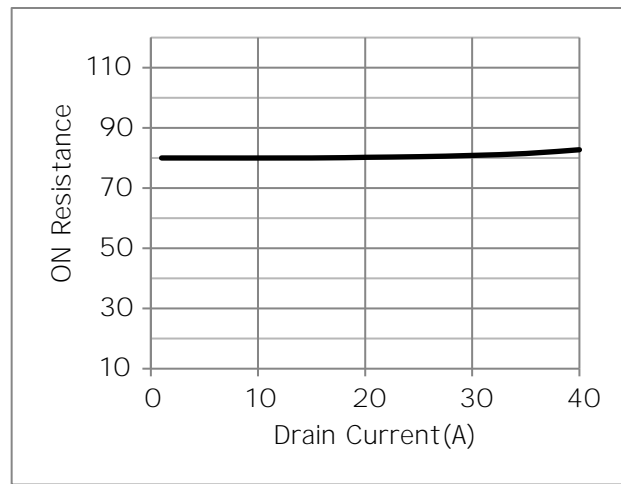


Fig.5 On-Resistance VS Gate Source Voltage

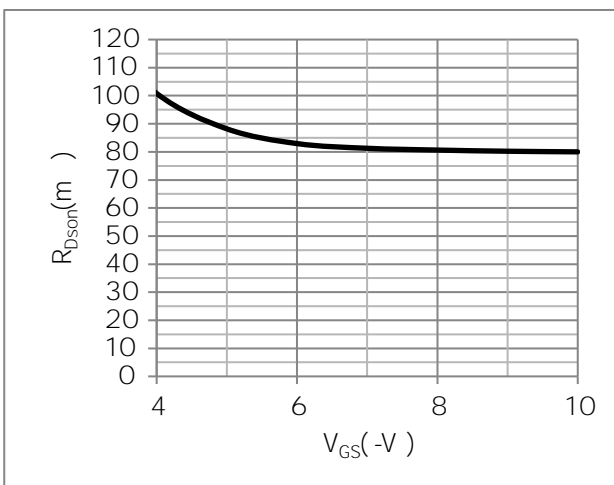


Fig.6 On-Resistance V.S Junction Temperature

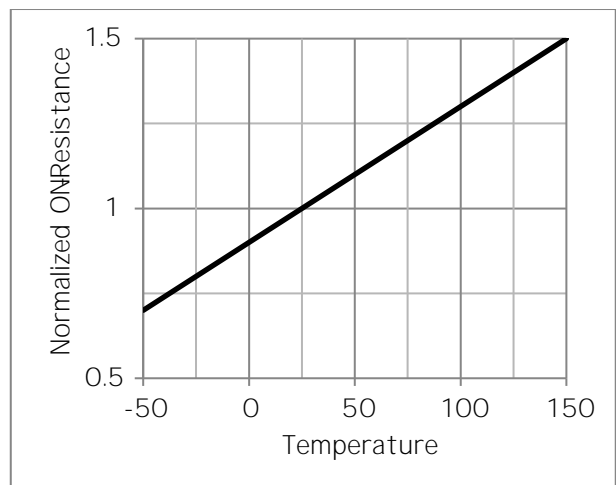


Fig.7 Switching Time Measurement Circuit

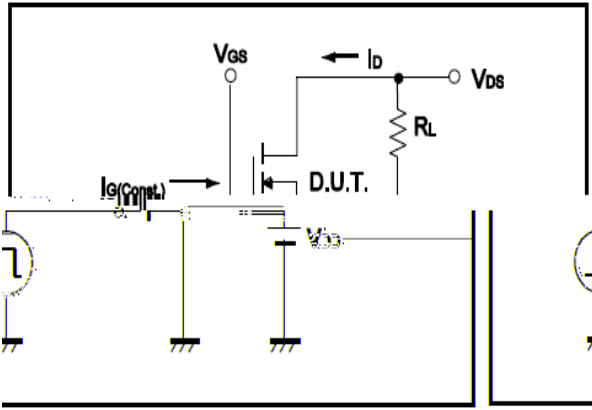


Fig.8 Gate Charge Waveform

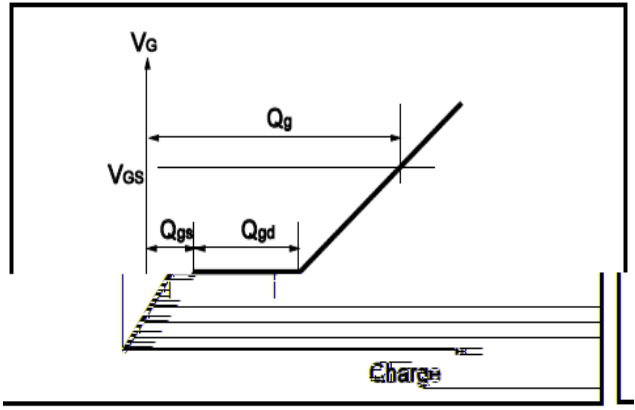


Fig.9 Switching Time Measurement Circuit

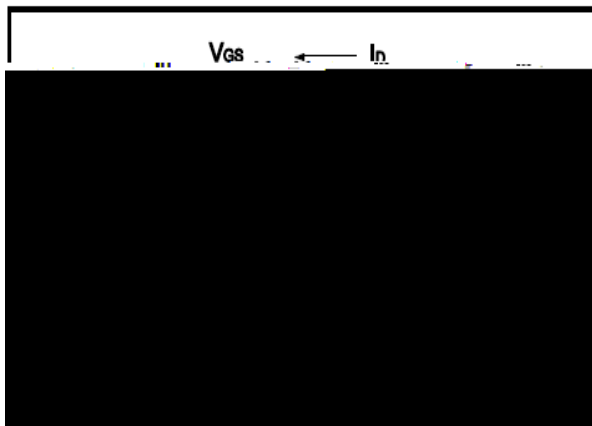


Fig.10 Gate Charge Waveform

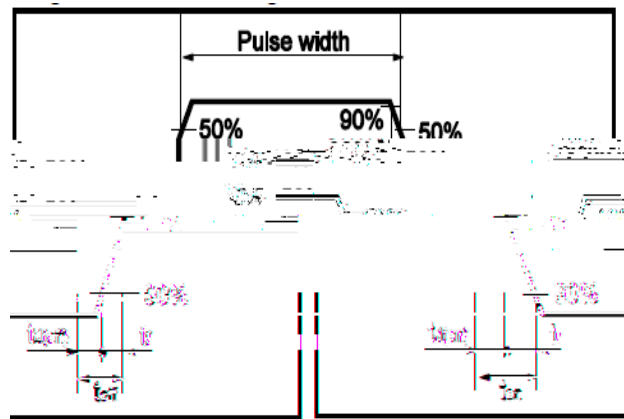


Fig.11 Avalanche Measurement Circuit

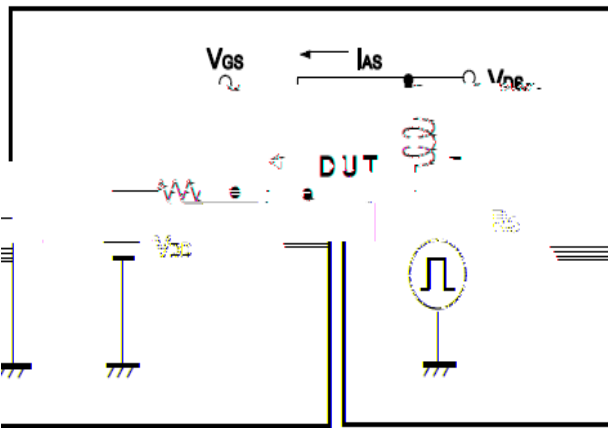


Fig.12 Avalanche Waveform

