

Key Features

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

Key Features (continued)

• $R_{DS(ON)}$ to minimize conductive loss
 • Dual DIE in one package

Applications

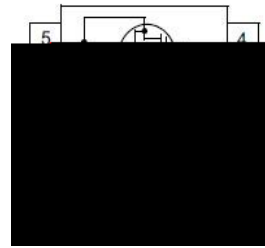
Power Management in Notebook Computer,
 Portable Equipment and Battery Powered
 Systems

Product Information

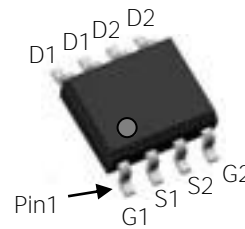
Part NO.	ZMD68101S
Marking	ZMD68101
Packing Information	REEL TAPE
Basic ordering unit (pcs)	4000

Electrical Characteristics

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 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

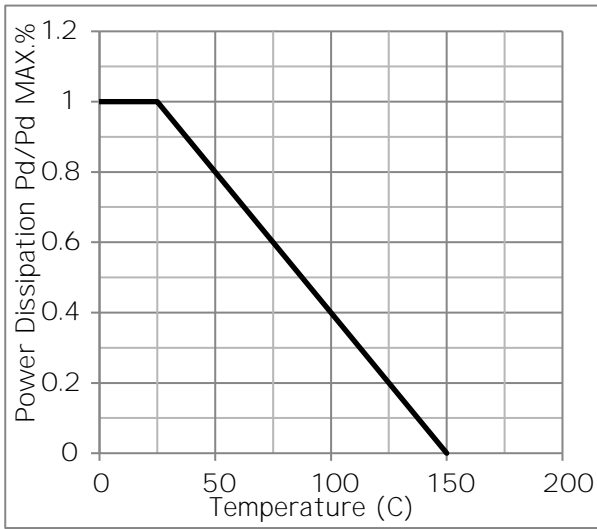


Fig.2 Typical output Characteristics

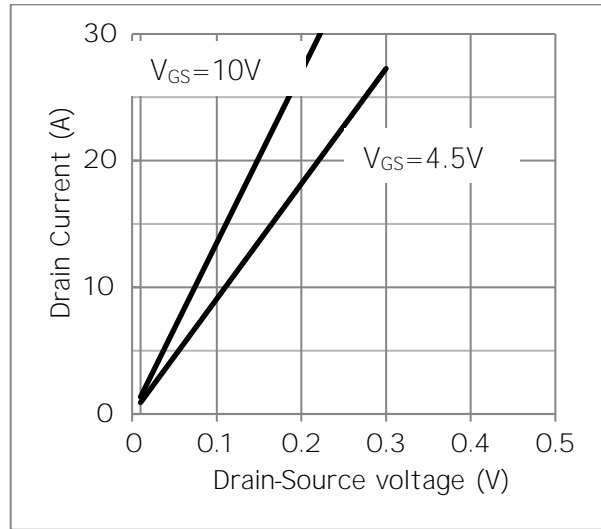


Fig.3 Threshold Voltage V.S Junction Temperature

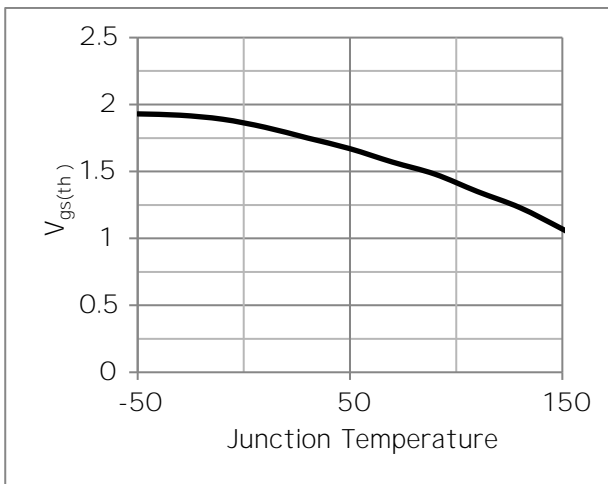


Fig.4 Resistance V.S Drain Current

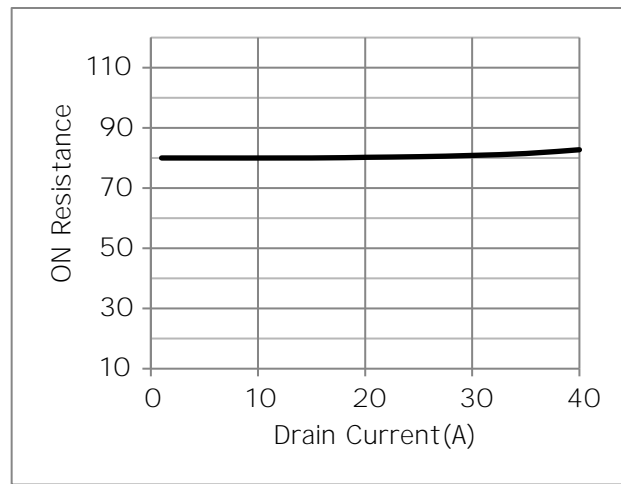


Fig.5 On-Resistance VS Gate Source Voltage

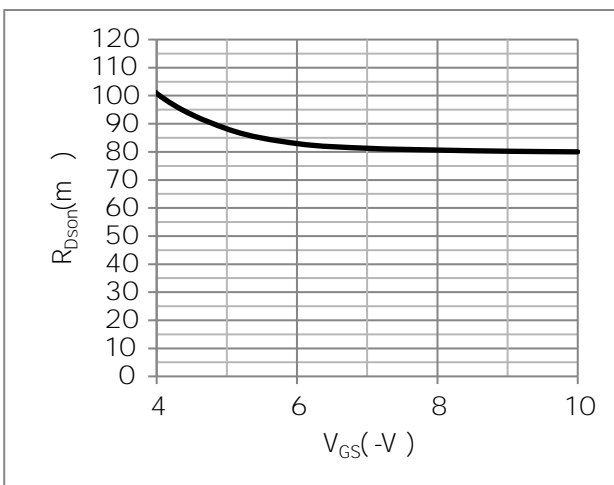


Fig.6 On-Resistance V.S Junction Temperature

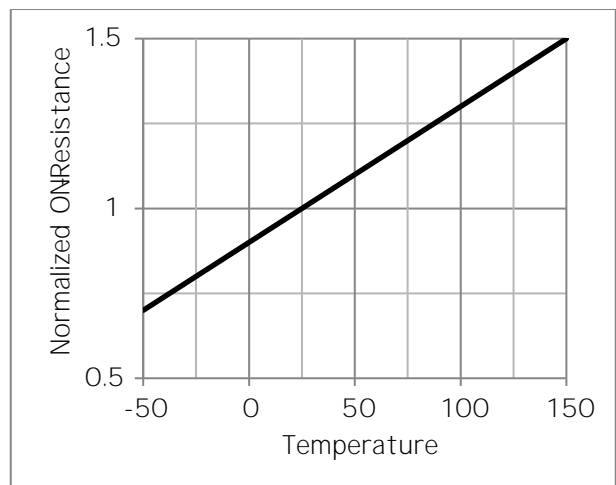


Fig.7 Switching Time Measurement Circuit

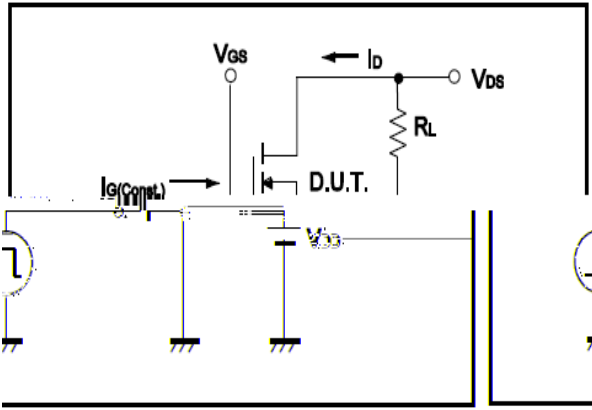


Fig.8 Gate Charge Waveform

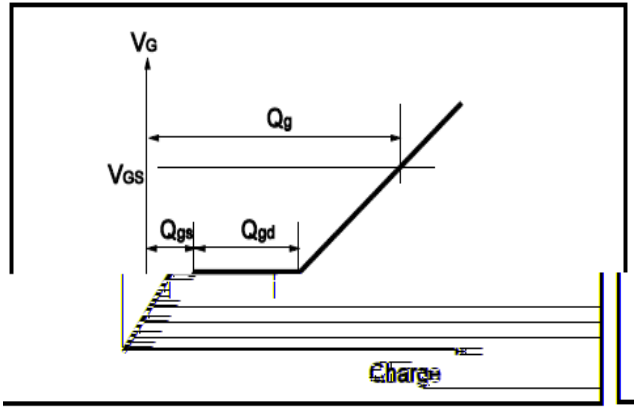


Fig.9 Switching Time Measurement Circuit

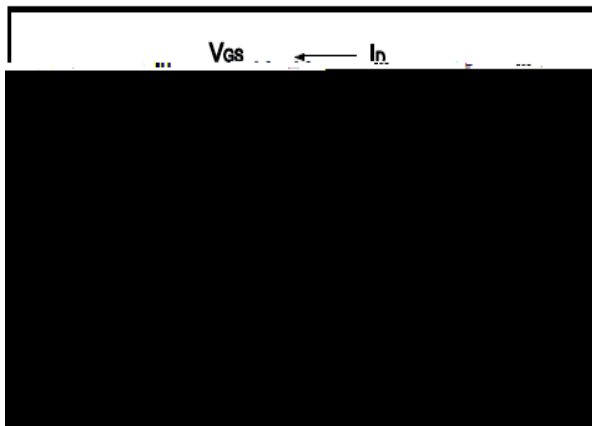


Fig.10 Gate Charge Waveform

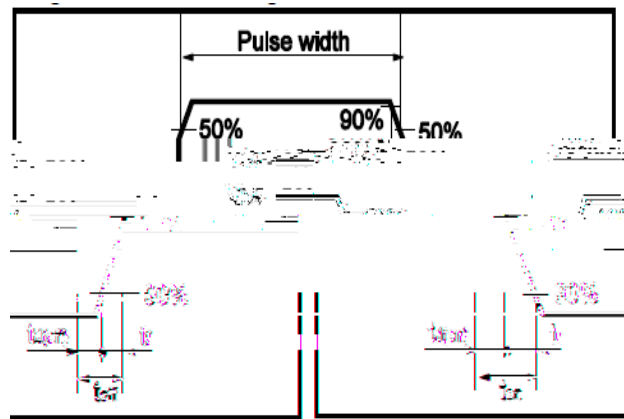


Fig.11 Avalanche Measurement Circuit

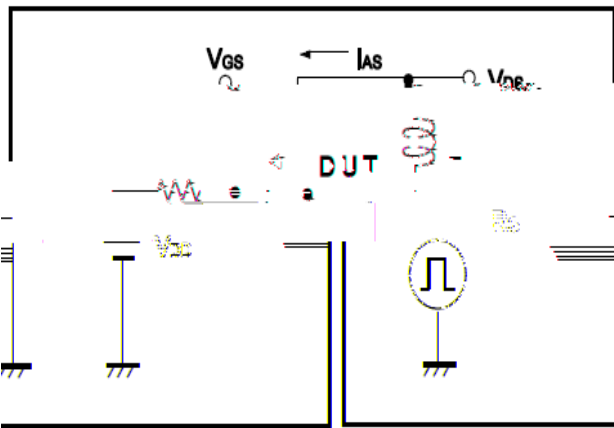


Fig.12 Avalanche Waveform

