

General Description

The ZMD68305S combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. This device is ideal for load switch and battery protection applications.

Features

Advance high cell density Trench technology

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

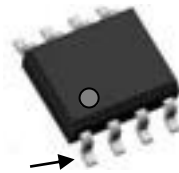
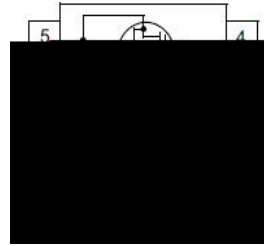
fast switching

Dual DIE in one package

Application

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

Product Summary



Ordering Information:

Part NO.	ZMD68305S
Marking	ZMD68305
Packing Information	REEL TAPE
Basic ordering unit (pcs)	4000

Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_D@TC=25$	10	A
	$I_D@TC=75$	7.6	A
	$I_D@TC=100$	6.3	A
Pulsed Drain Current	I_{DM}	24	A
Total Power Dissipation	$P_D@TC=25$	3.6	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	
Single Pulse Avalanche Energy	E_{AS}	30	mJ
Avalanche Current	$I_{AS} I_{AR}$	25	A

Fig.1 Power Dissipation

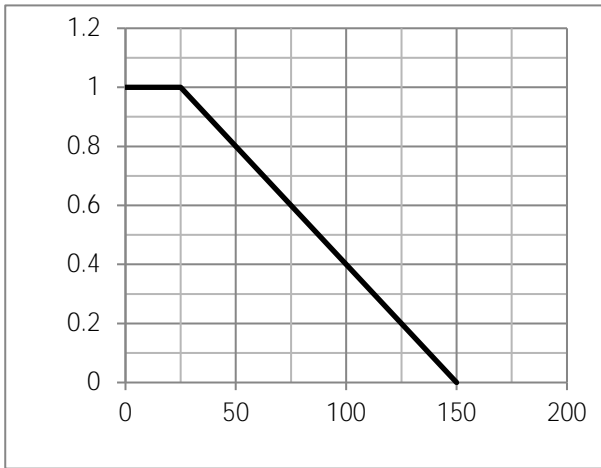


Fig.2 Typical output Characteristics

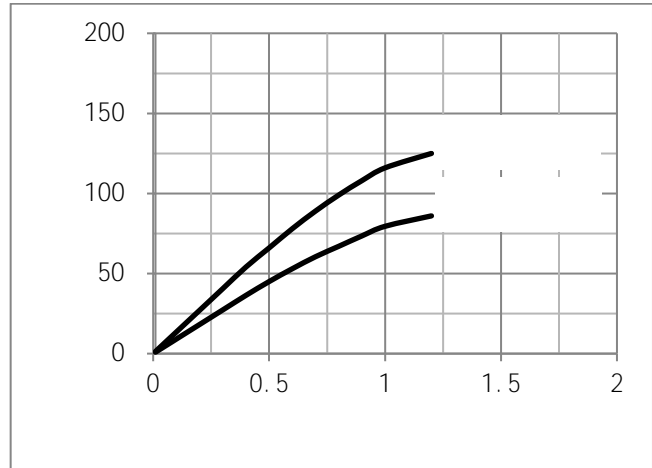


Fig.3 Threshold Voltage V.S Junction Temperature

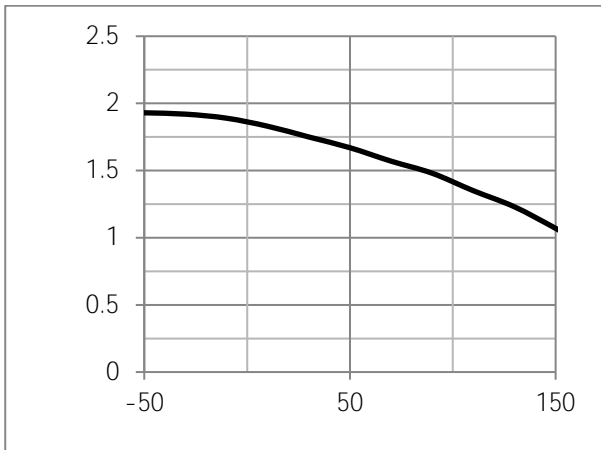


Fig.4 Resistance V.S Drain Current

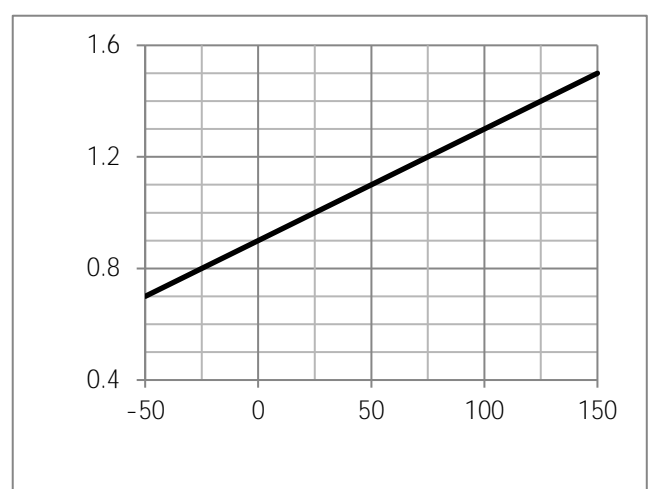
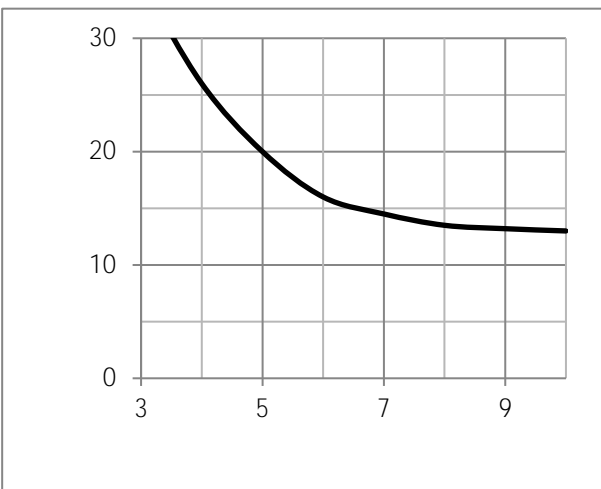
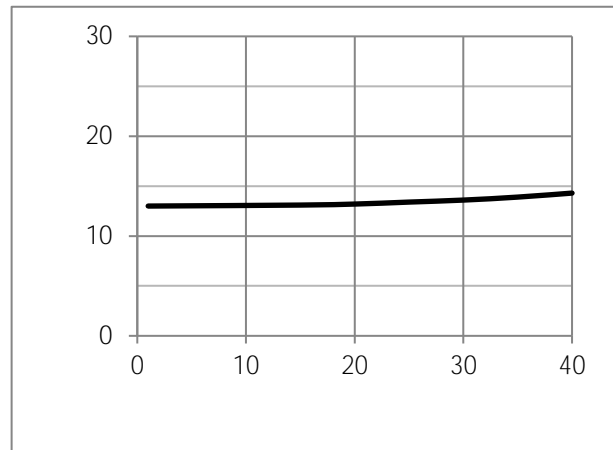


Fig.7 Switching Time Measurement Circuit

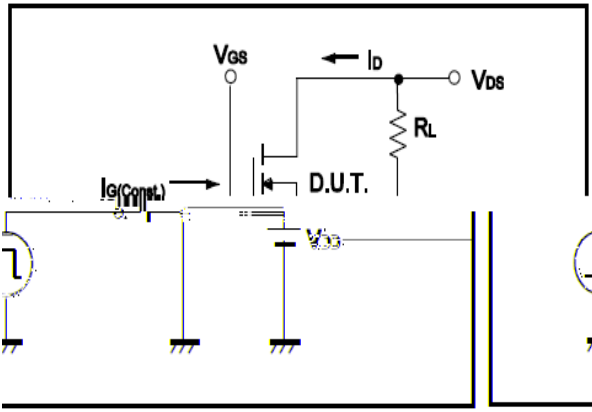


Fig.8 Gate Charge Waveform

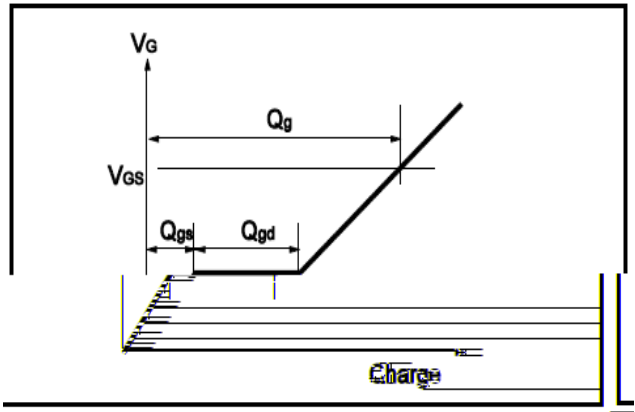


Fig.9 Switching Time Measurement Circuit

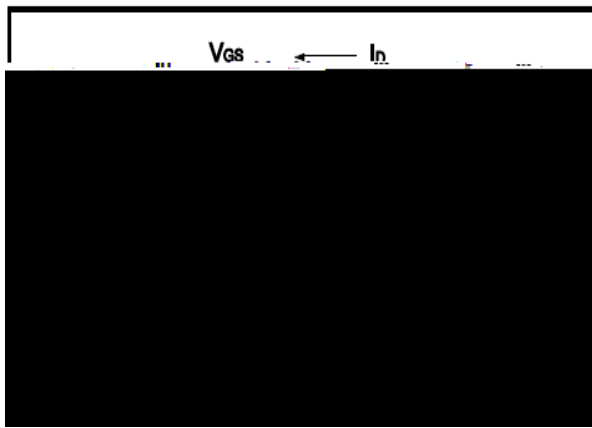


Fig.10 Gate Charge Waveform

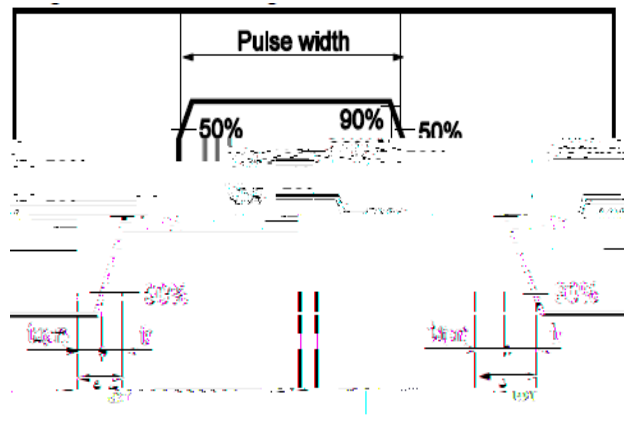


Fig.11 Avalanche Measurement Circuit

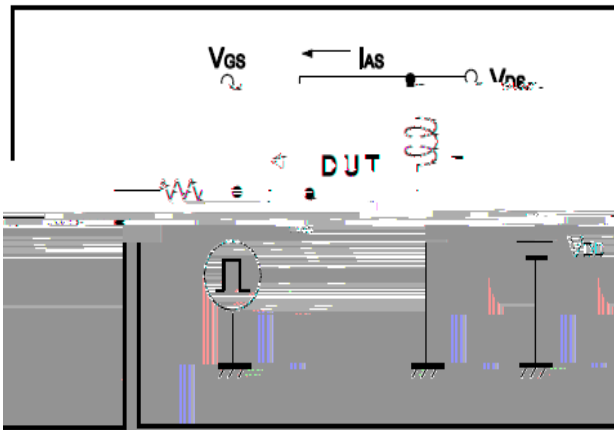
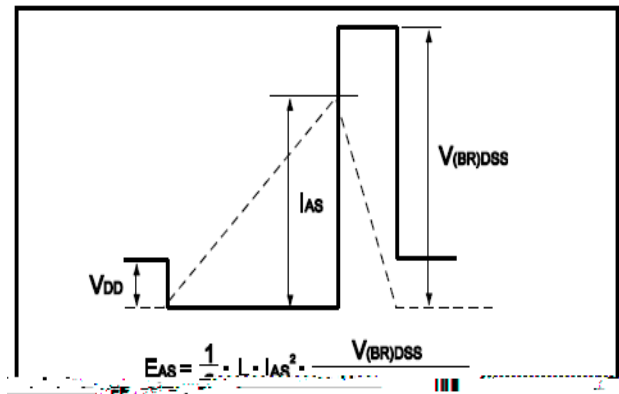


Fig.12 Avalanche Waveform



Dimensions(SOP8)

Unit: mm

SYMBOL	min	TYP	max	SYMBOL	min		max
A	4.80		5.25	C	1.30		1.75
A1	0.37		0.49	C1	0.55		0.75
A2		1.27		C2	0.55		0.65
A3		0.41		C3	0.05		0.20
B	5.80		6.20	C4	0.10	0.20	0.23
B1	3.80		4.10	D		1.05	
B2		5.00		D1	0.40		0.62

