



Product Summary

The ZMS400N10D combines advanced SGT MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.



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

nd Synchronous Rectifier



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$T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_D @ TC=25^\circ C$	21	A
	$I_D @ TC=75^\circ C$	16	A
	$I_D @ TC=100^\circ C$	13	A
Pulsed Drain Current ^①	I_{DM}	63	A
Total Power Dissipation	$P_D @ TC=25^\circ C$	70	W
Total Power Dissipation	$P_D @ TA=25^\circ C$	2.5	W
Operating Junction Temperature	T_J	-55 to 150	$^\circ C$
Storage Temperature	T_{STG}	-55 to 150	$^\circ C$



Fig.1 Power Dissipation Derating Curve

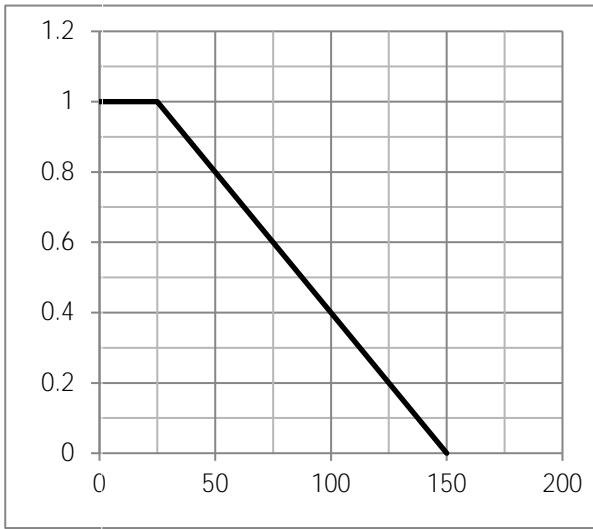


Fig.2 Typical output Characteristics

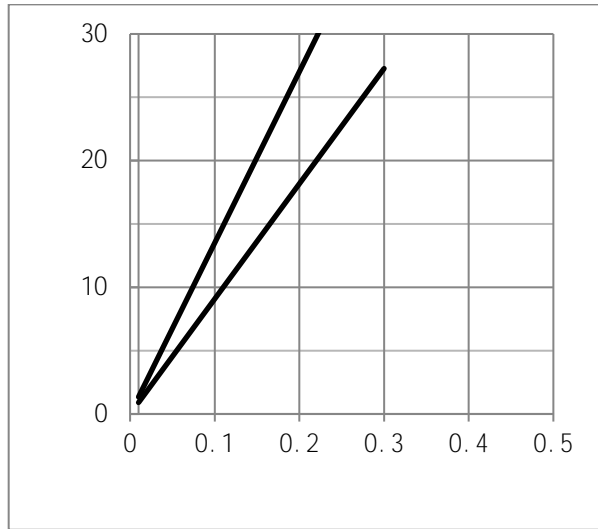


Fig.3 Threshold Voltage V.S Junction Temperature

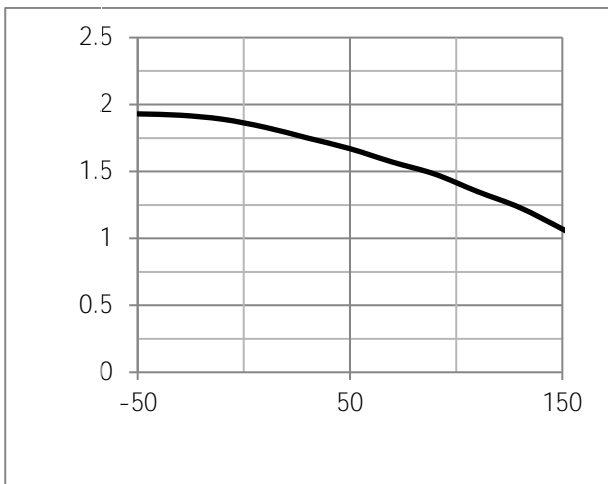


Fig.4 Resistance V.S Drain Current

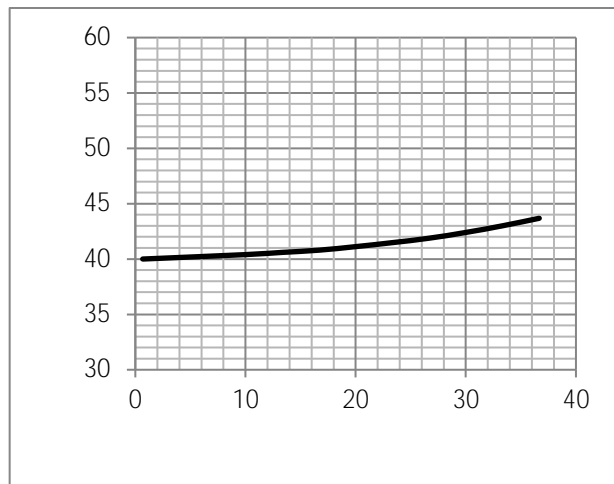


Fig.7 Switching Time Measurement Circuit

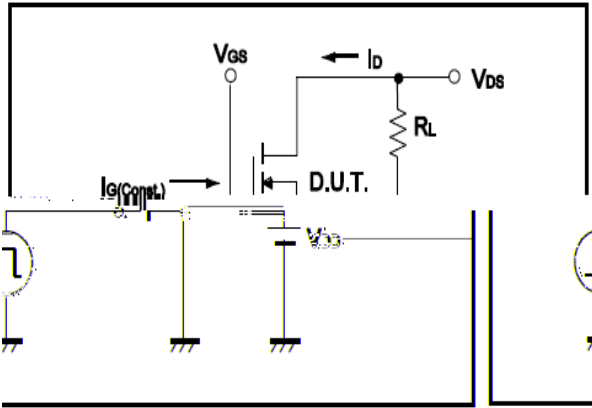


Fig.8 Gate Charge Waveform

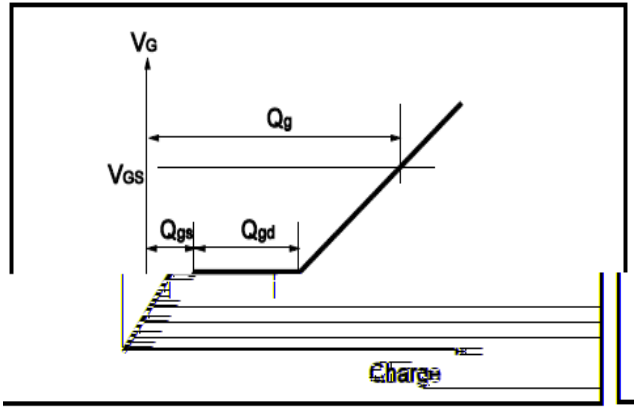


Fig.9 Switching Time Measurement Circuit

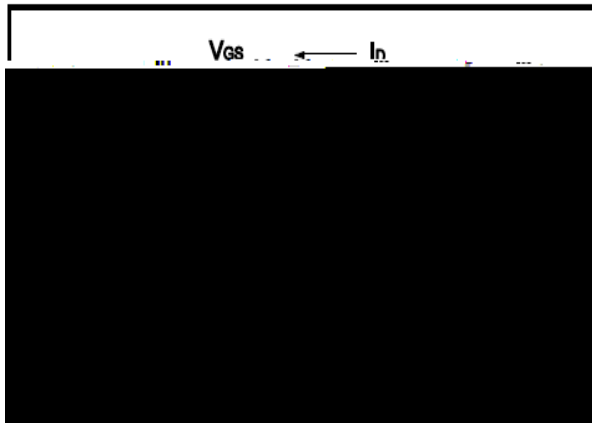


Fig.10 Gate Charge Waveform

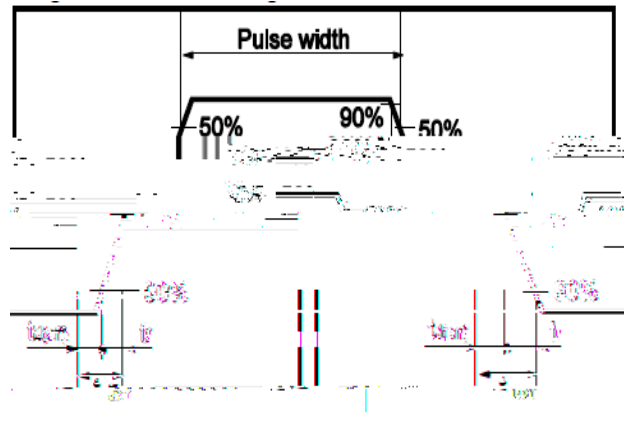


Fig.11 Avalanche Measurement Circuit

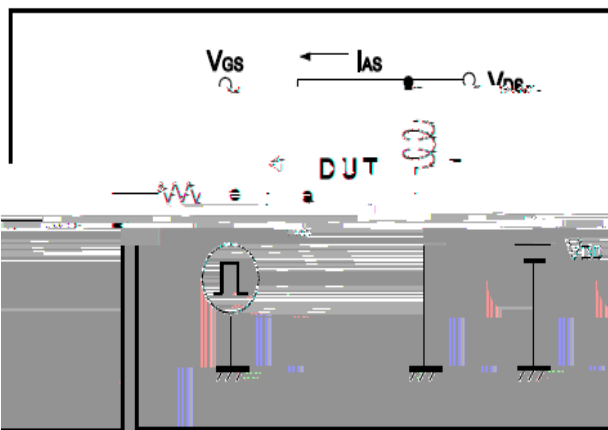
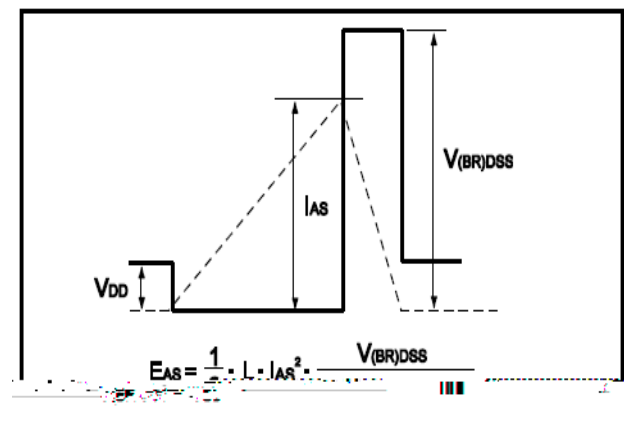


Fig.12 Avalanche Waveform





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