



Product Summary

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



Trench technology

_{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°C}	21	A
	I _{D@TC=75°C}	16	A
	I _{D@TC=100°C}	13	A
Pulsed Drain Current ^①	I _{DM}	63	A
Total Power Dissipation	P _{D@TC=25°C}	70	W
Total Power Dissipation	P _{D@TA=25°C}	2.5	W
Operating Junction Temperature	T _J	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°C



Fig.1 Power Dissipation Derating Curve

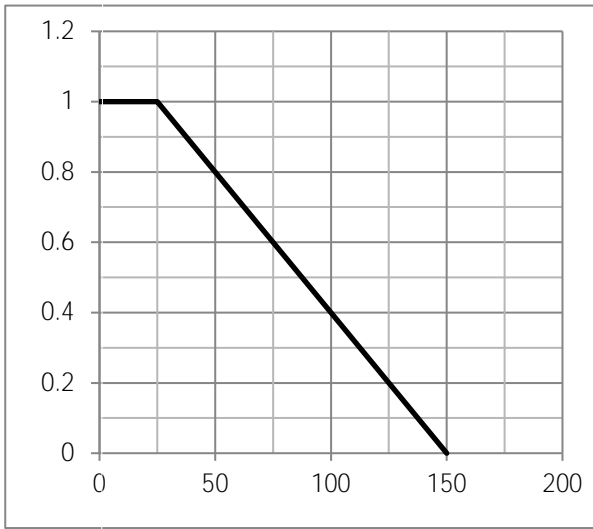


Fig.2 Typical output Characteristics

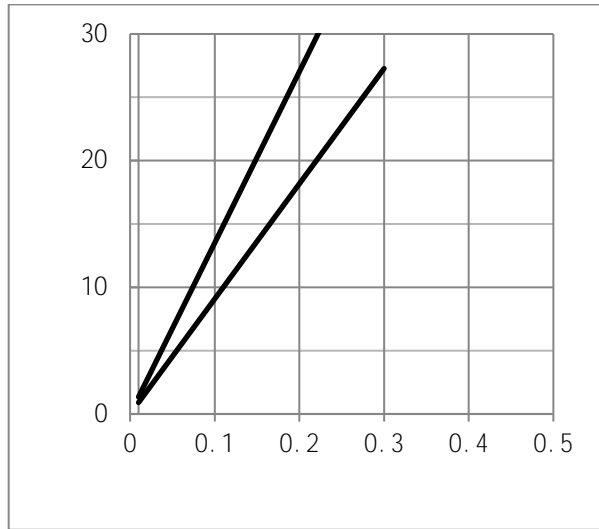


Fig.3 Threshold Voltage V.S Junction Temperature

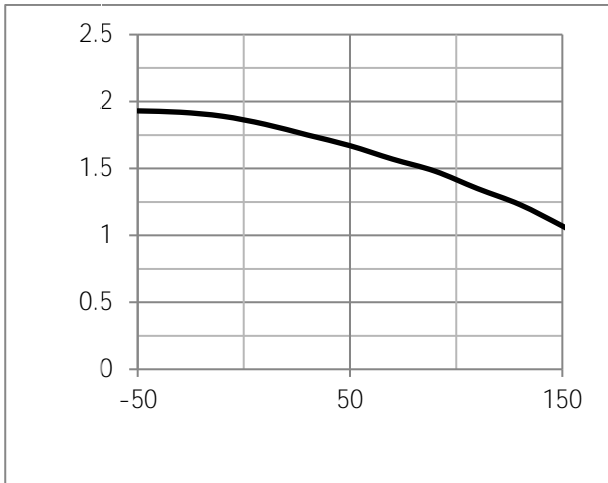


Fig.4 Resistance V.S Drain Current

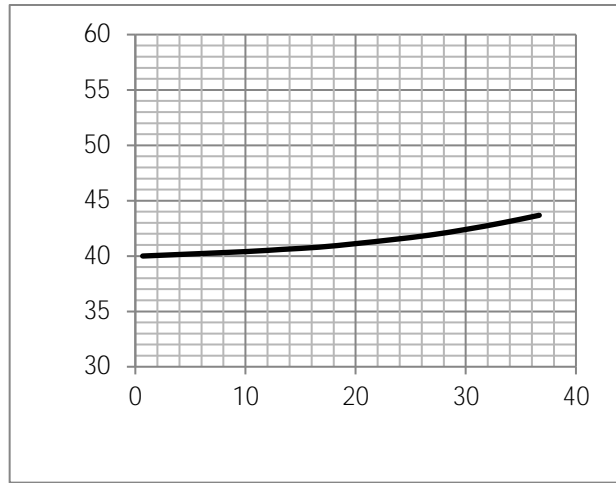




Fig.7 Switching Time Measurement Circuit

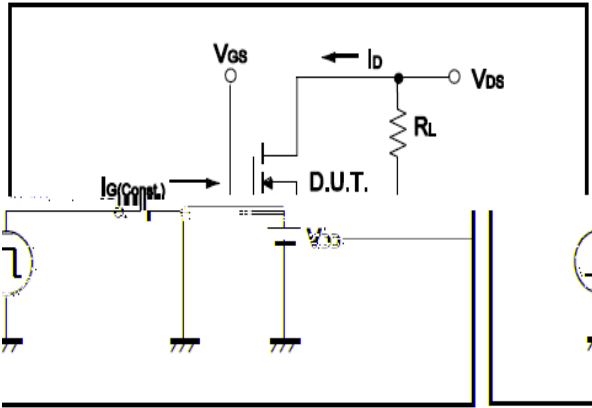


Fig.8 Gate Charge Waveform

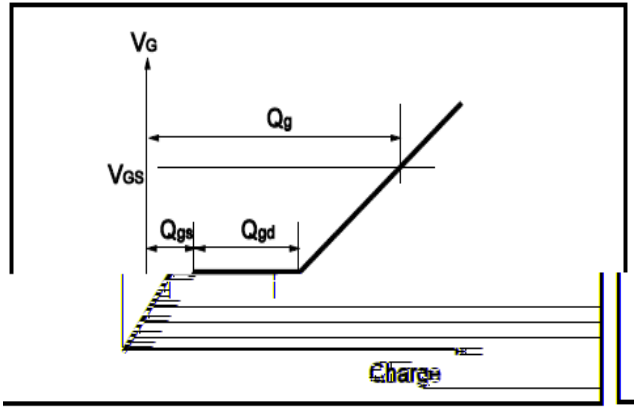


Fig.9 Switching Time Measurement Circuit

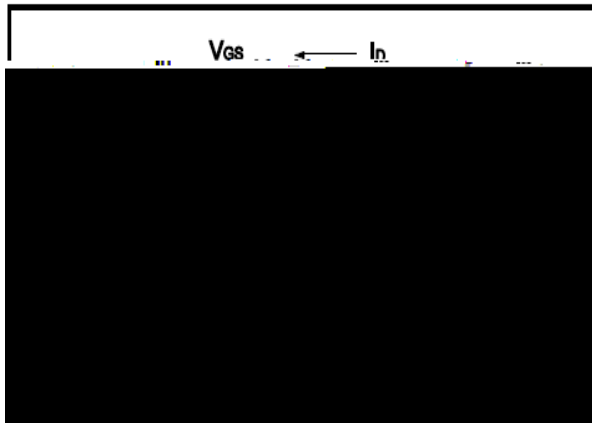


Fig.10 Gate Charge Waveform

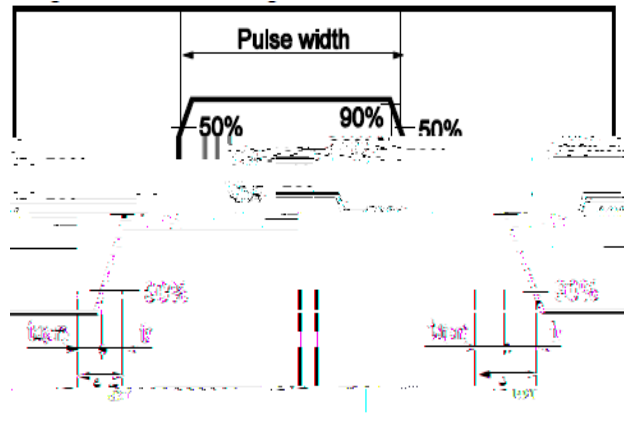


Fig.11 Avalanche Measurement Circuit

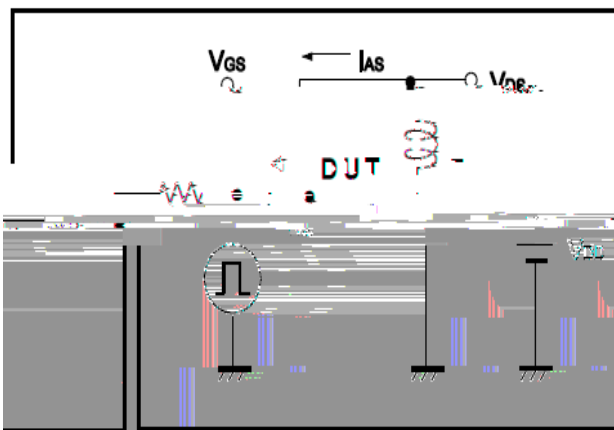
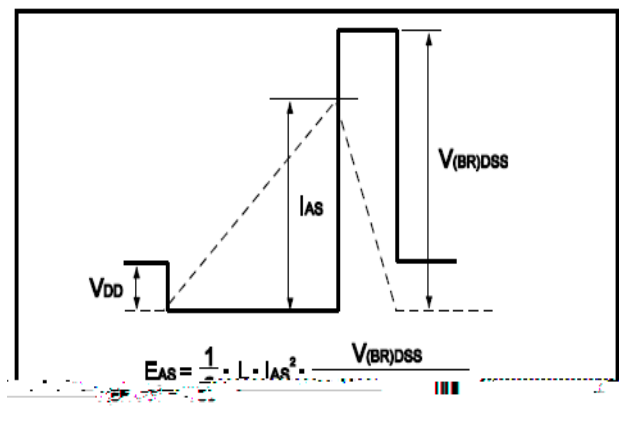


Fig.12 Avalanche Waveform





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