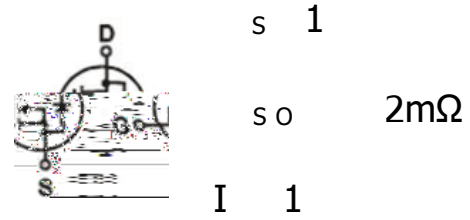




Product Summary

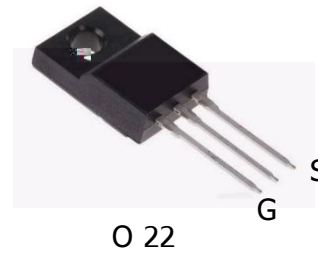
The ZMS040N10HF combines advanced SGT MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.



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



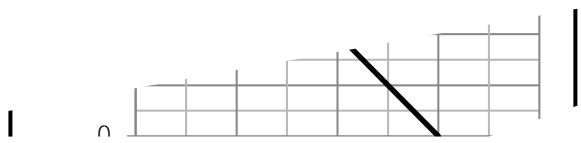
Synchronous Rectification for AC-DC/DC-DC converter
Oring switches
Power Tools



Part No	S 1 H
Marking	S 1 H
Packaging Information	Bulk Tube
Basic Ordering Unit (pcs)	800

$T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@TC=25}$	100	A
	$I_{D@TC=75}$	76	A
	$I_{D@TC=100}$	63	A
Pulsed Drain Current	I_{DM}	400	A
Total Power Dissipation($T_C=25$)	$P_D@TC=25$	85	W
Total Power Dissipation($T_A=25$)	$P_D@TA=25$	3.4	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy@L=0.1mH	E_{AS}	200	mJ
Avalanche Current@L=0.1mH	I_{AS}	35	A





g On es stance S Gate Source o tage

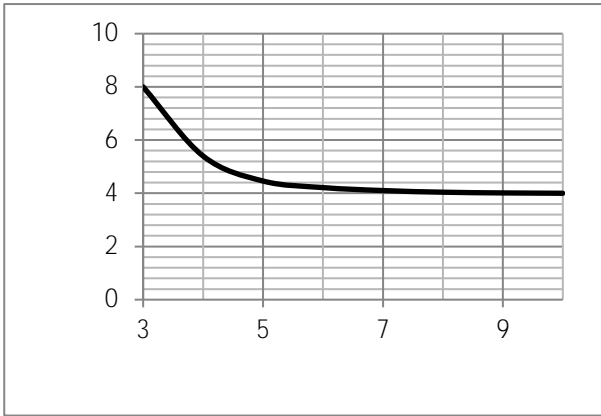


Fig.9 SOA Maximum Safe Operating Area

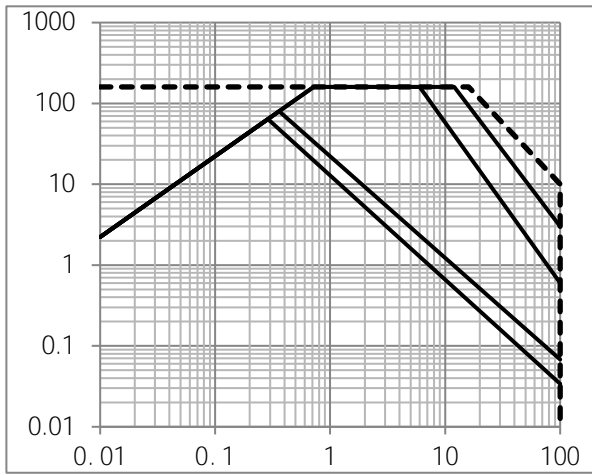
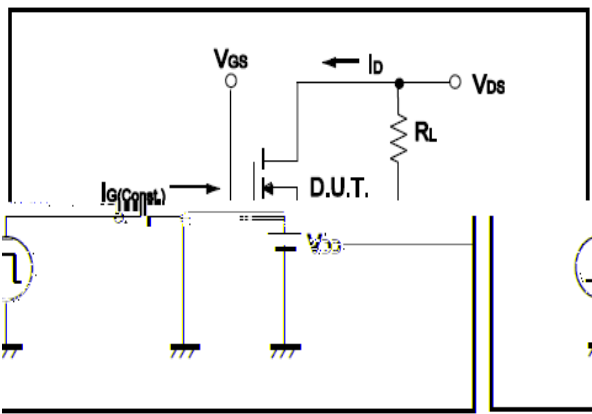


Fig.11 Switching Time Measurement Circuit



g On es stance S unct on emperature

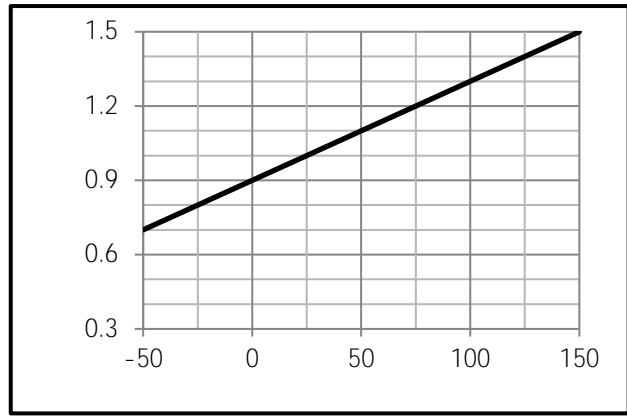


Fig.10 ID-Junction Temperature

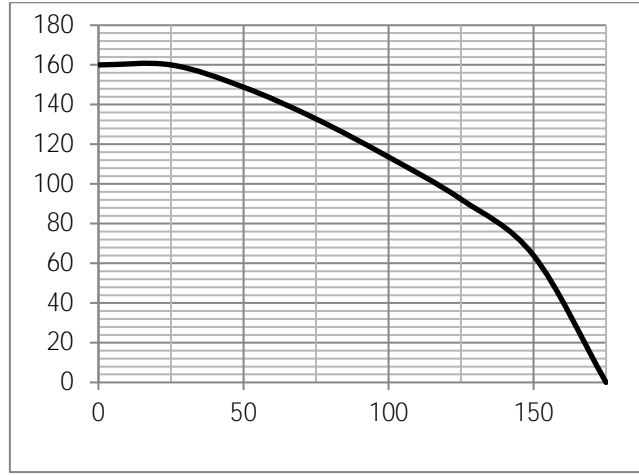


Fig.12 Gate Charge Waveform

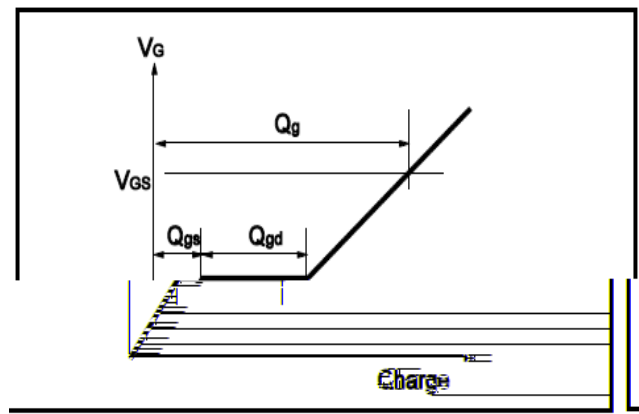




Fig.13 Switching Time Measurement Circuit

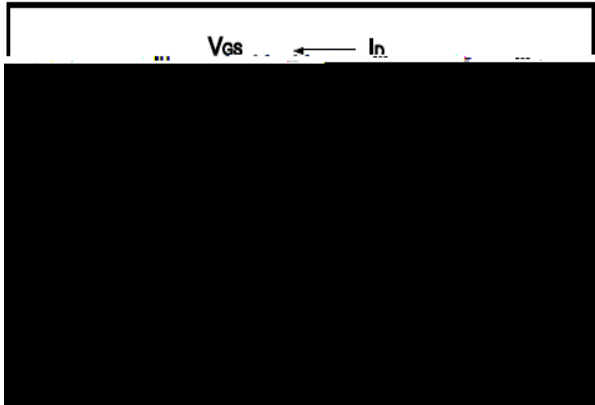


Fig.14 Gate Charge Waveform

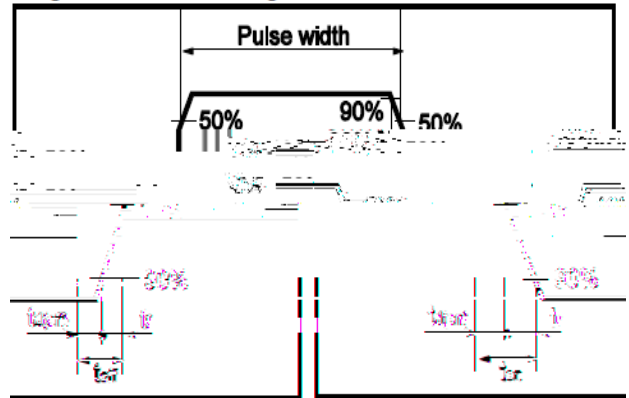


Fig.15 Avalanche Measurement Circuit

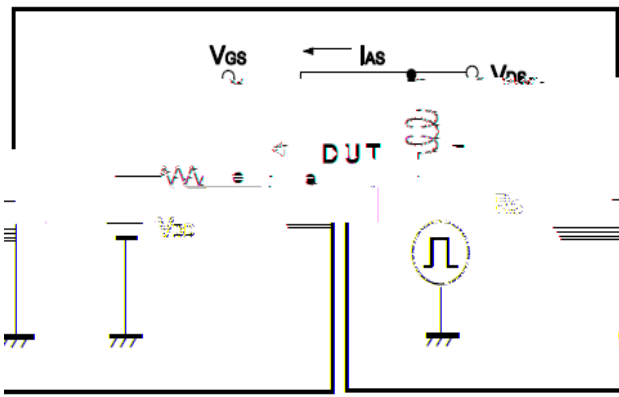


Fig.16 Avalanche Waveform

