



General Description

The ZM100N08HN combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.

Features

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

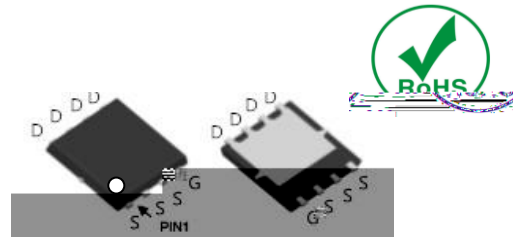
Application

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

Product Summary



$V_{DS} = 80V$
 $R_{DS(ON)} = 9m$
 $I_D = 60A$



DFN5 6

Ordering Information:

Part NO.	ZM100N08HN
Marking	ZM100N08H
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	80	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@TC=25}$	60	A
	$I_{D@TC=75}$	45.6	A
	$I_{D@TC=100}$	37.8	A
Pulsed Drain Current	I_{DM}	210	A
Total Power Dissipation($TC=25$)	$P_D@TC=25$	85	W
Total Power Dissipation($TA=25$)	$P_D@TA=25$	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}	180	mJ
Avalanche Current@L=0.1mH	I_{AS}	60	A



Fig.1 Gate-Charge Characteristics

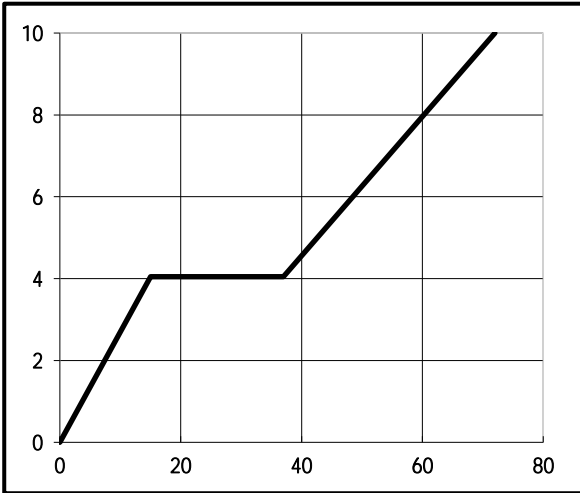


Fig.2 Capacitance Characteristics

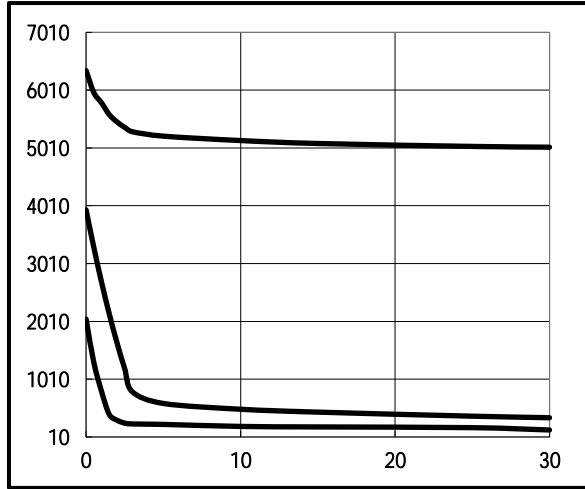


Fig.3 Power Dissipation

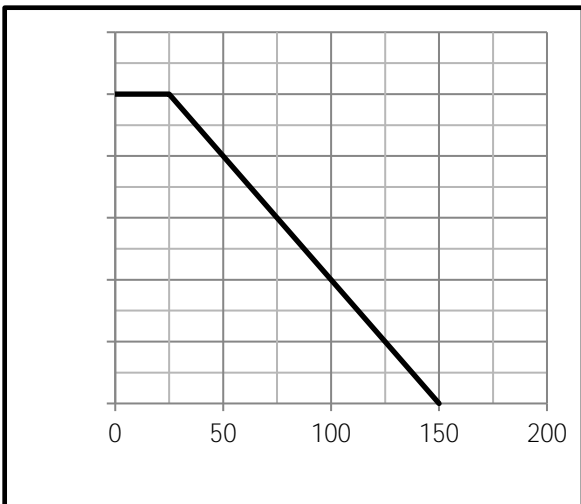


Fig.4 Typical output Characteristics

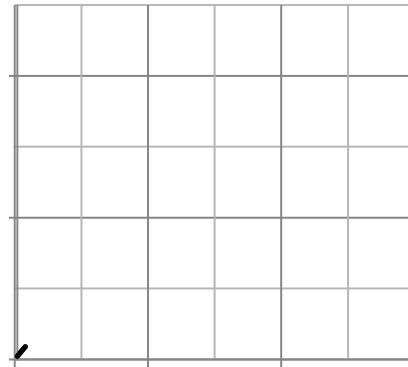


Fig.5 Threshold Voltage V.S Junction Temperature

Fig.6 Resistance V.S Drain Current



Fig.7 On-Resistance VS Gate Source Voltage

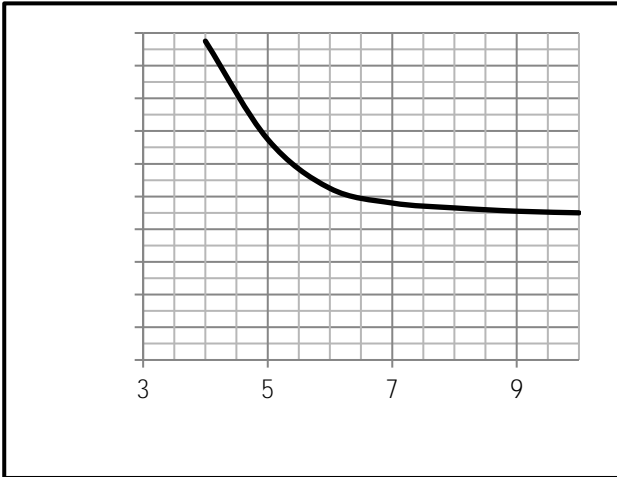


Fig.8 On-Resistance V.S Junction Temperature

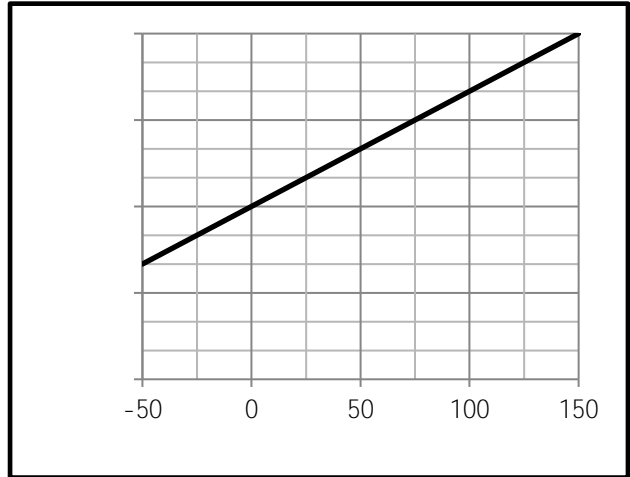


Fig.9 Switching Time Measurement Circuit

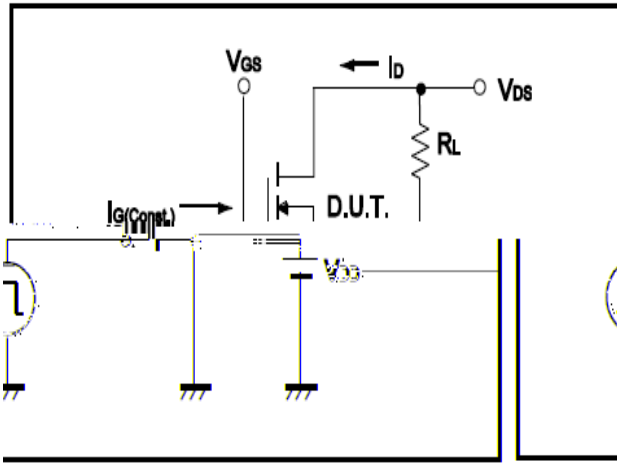


Fig.10 Gate Charge Waveform

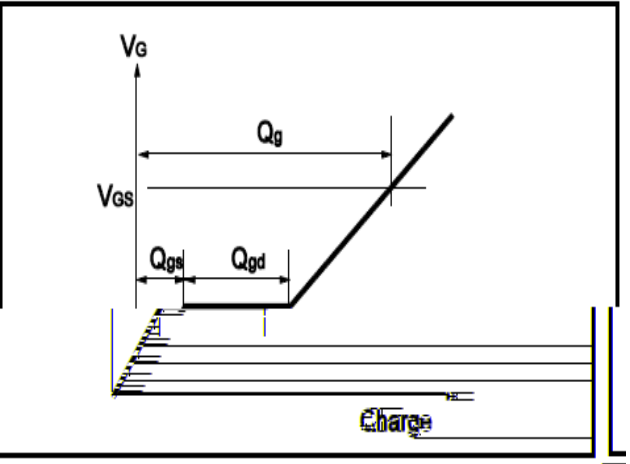


Fig.11 Switching Time Measurement Circuit

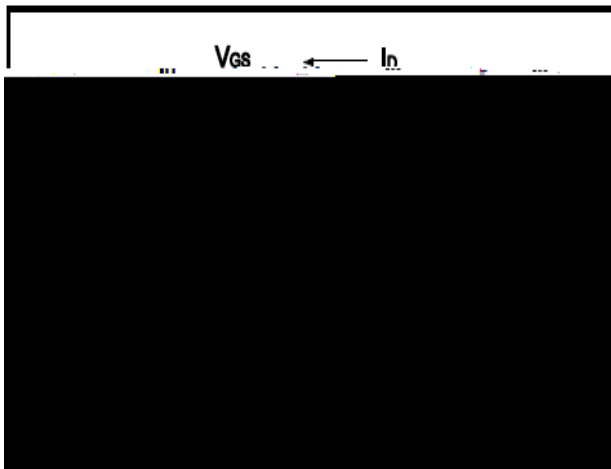
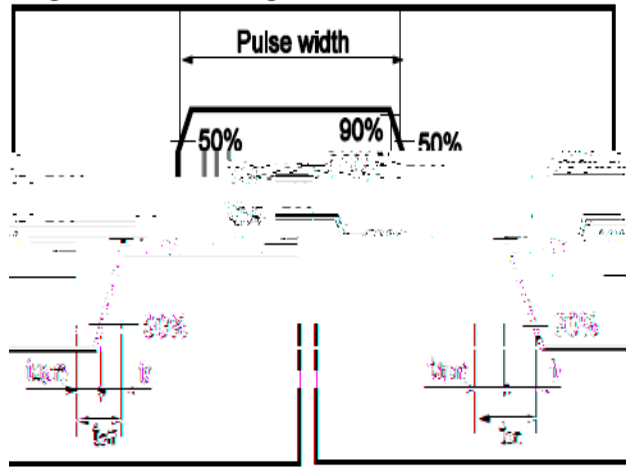


Fig.12 Gate Charge Waveform





Dimensions DFN5x6

Unit mm

