



**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

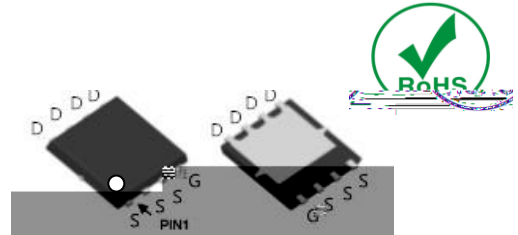
**Product Summary**



$V_{DS} = 80V$

$R_{DS(ON)} = 9m$

$I_D = 60A$



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	$V_{GS}$	$\pm 20$	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

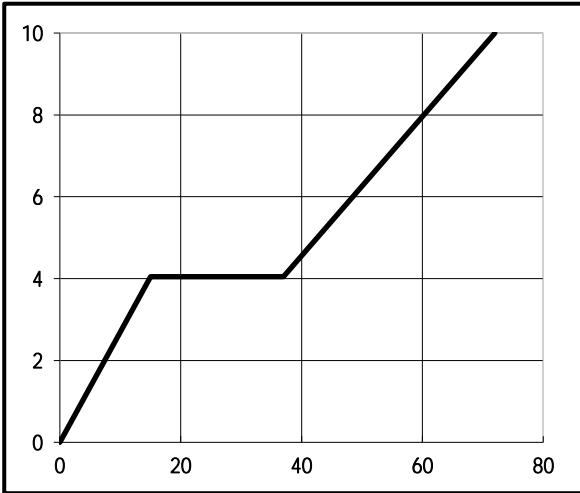


Fig.2 Capacitance Characteristics

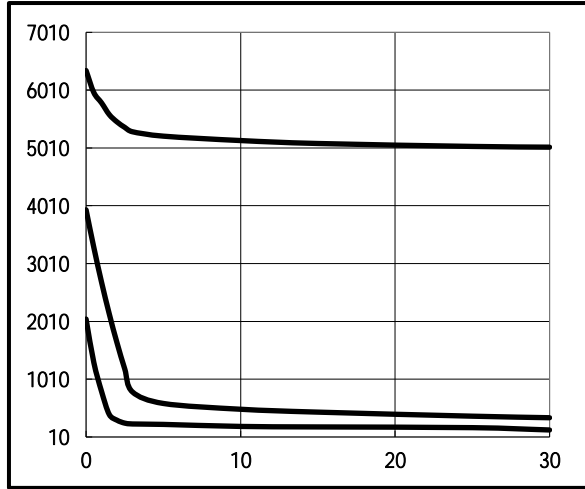


Fig.3 Power Dissipation

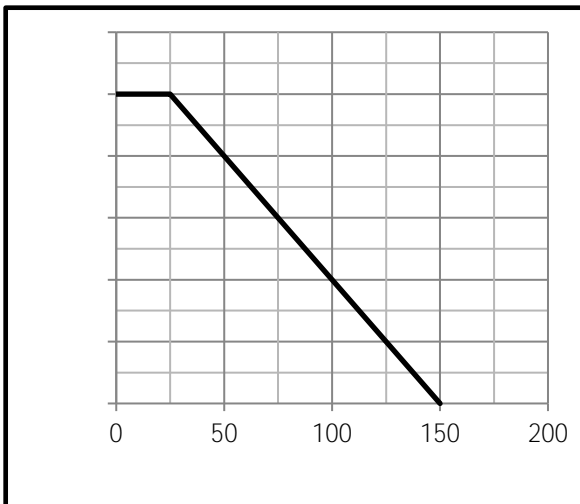


Fig.4 Typical output Characteristics

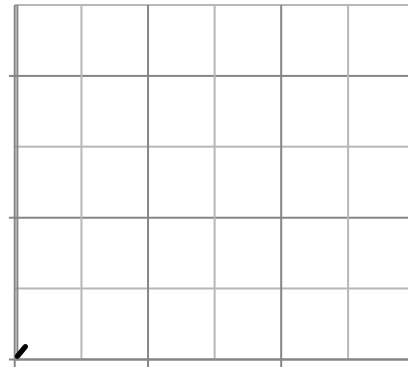


Fig.5 Threshold Voltage V.S Junction Temperature

Fig.6 Resistance V.S Drain Current



Fig.7 On-Resistance VS Gate Source Voltage

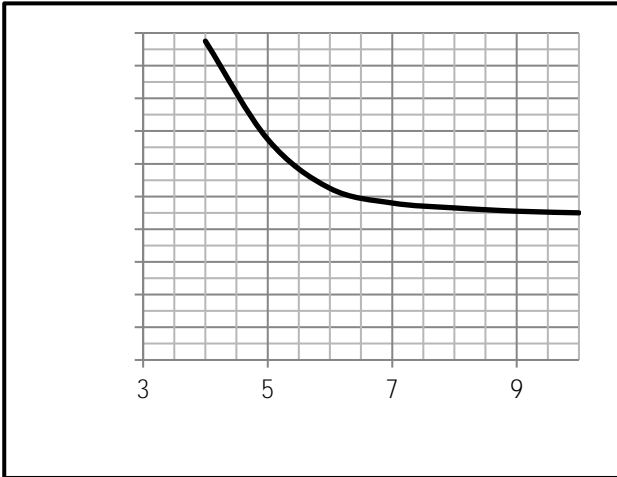


Fig.8 On-Resistance V.S Junction Temperature

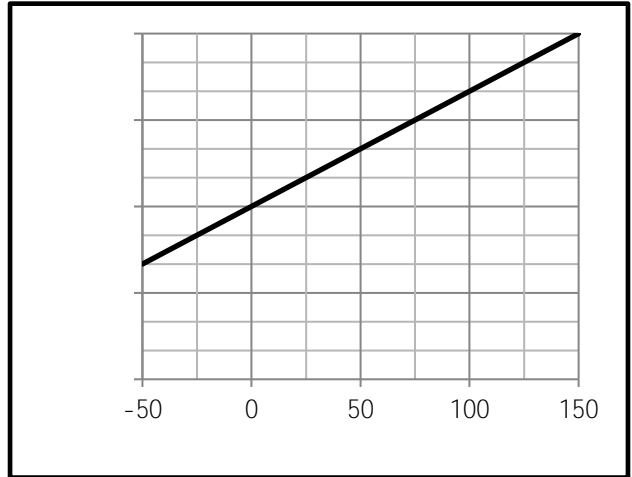


Fig.9 Switching Time Measurement Circuit

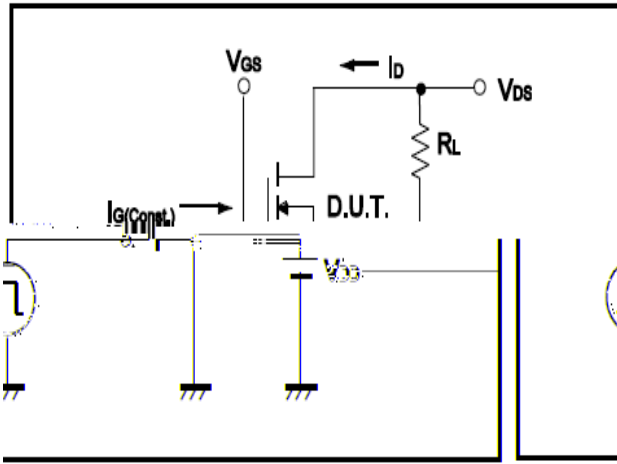


Fig.10 Gate Charge Waveform

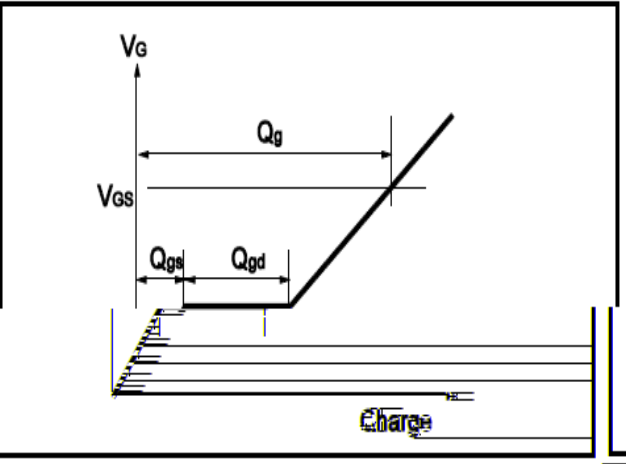


Fig.11 Switching Time Measurement Circuit

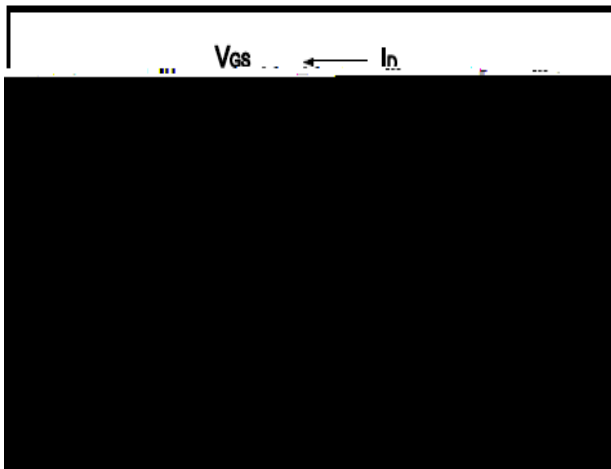
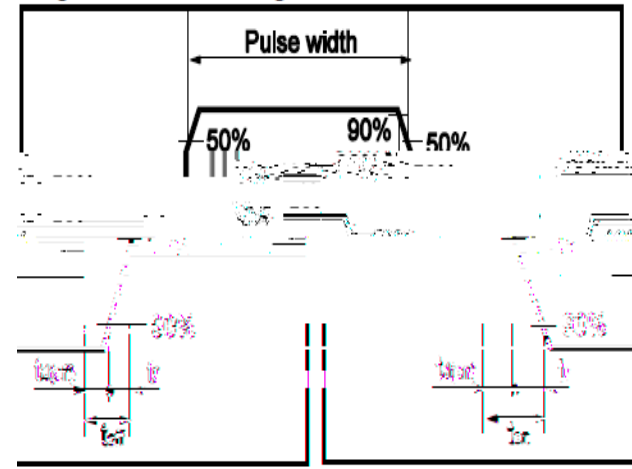


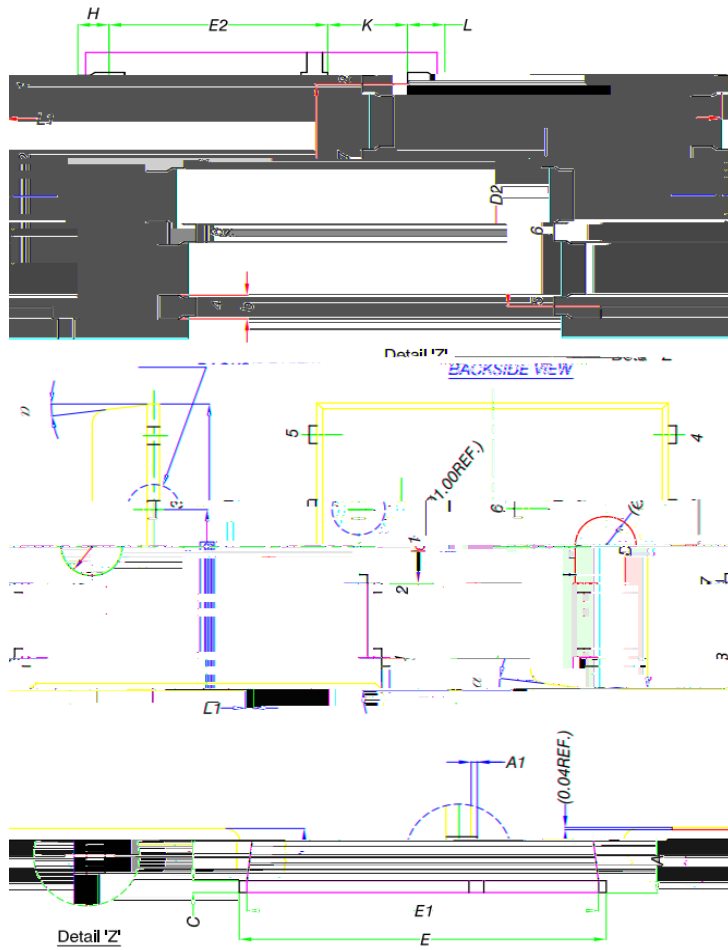
Fig.12 Gate Charge Waveform





Dimensions DFN5x6

Unit mm



MILLIMETERS

$\phi$	4.80	4.90	5.00
$\phi$	3.51	3.81	3.96
	5.90	6.00	6.10
E1	5.20	5.28	5.30
e	1.27	1.27 BSC	
	0.41	0.51	0.61
	1.10		
		0.51	0.61
		0.51	0.06
			12°