



**Product Description**

The ZM098N06N combines advanced trench MOSFET technology with a low resistance package to provide extremely low  $R_{DS(ON)}$ .

**Key Features**

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

**Applications**

• Synchronous Rectifier

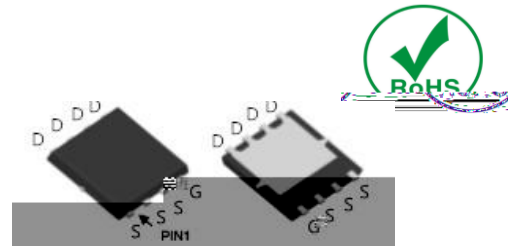
**Product Summary**



$V_{DS} = 60V$

$R_{DS(ON)} = 10m\Omega$

$I_D = 50A$



DFN56

**Ordering Information**

Part NO.	ZM098N06N
Marking	ZM098N06
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

**Electrical Characteristics**  $T_C = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	60	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_{D@TC=25}$	50	A
	$I_{D@TC=75}$	38	A
	$I_{D@TC=100}$	31	A
Pulsed Drain Current	$I_{DM}$	150	A
Total Power Dissipation( $TC=25^\circ C$ )	$P_D@TC=25$	70	W
Total Power Dissipation( $TA=25^\circ C$ )	$P_D@TA=25$	2.8	W
Operating Junction Temperature	$T_J$	-55 to 150	
Storage Temperature	$T_{STG}$	-55 to 150	
Avalanche Current	$I_{AS} I_{AR}$	40	A



Fig.1 Gate-Charge Characteristics

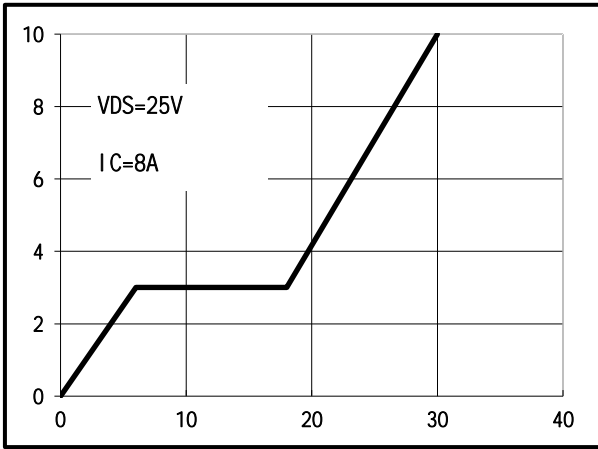


Fig.2 Capacitance Characteristics

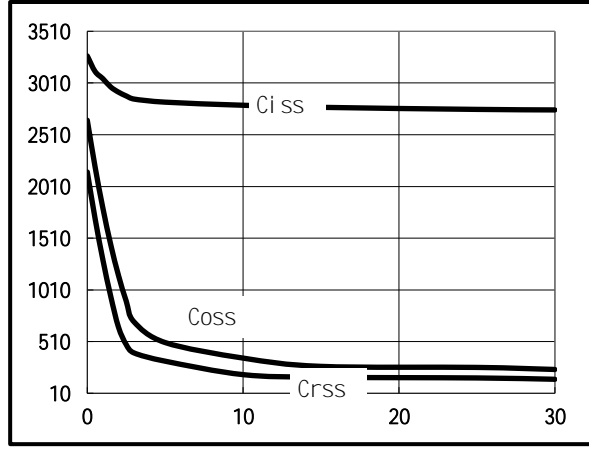


Fig.3 Power Dissipation

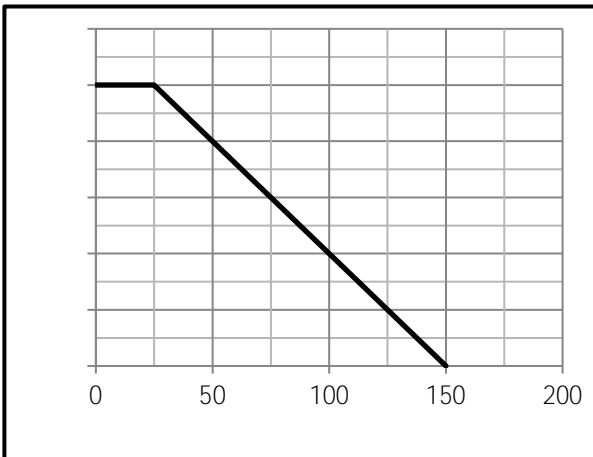


Fig.4 Typical output Characteristics

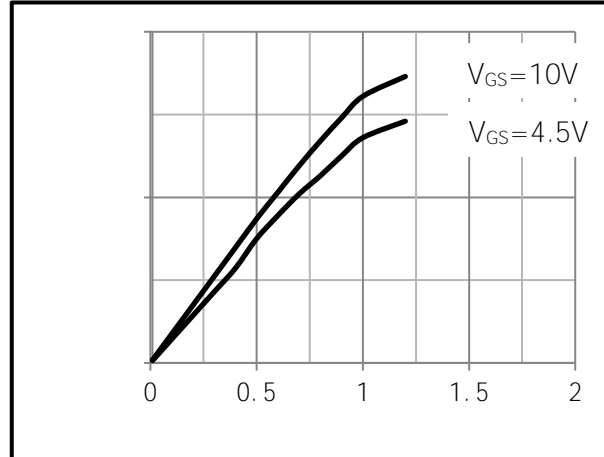


Fig.5 Threshold Voltage V.S Junction Temperature

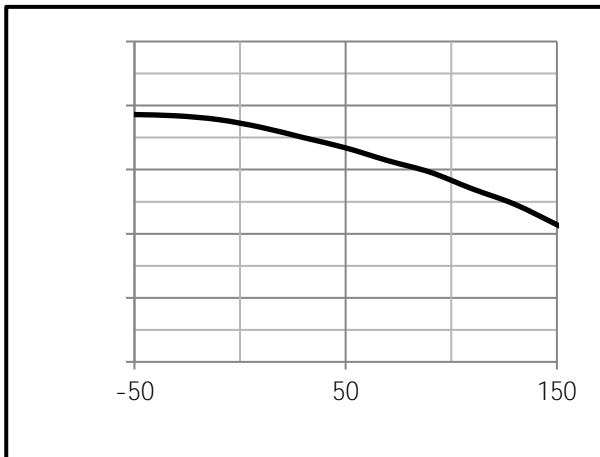


Fig.6 Resistance V.S Drain Current

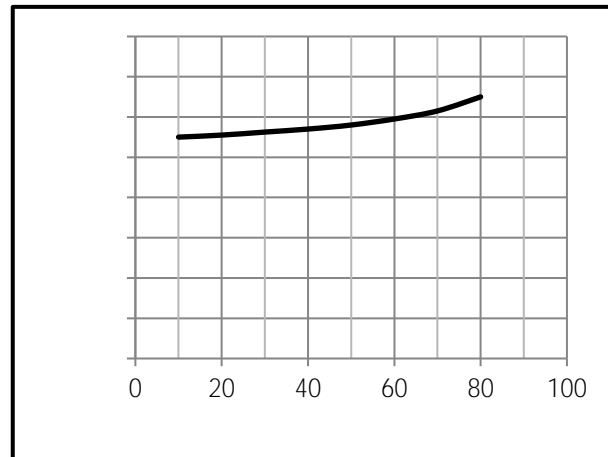




Fig.7 On-Resistance VS Gate Source Voltage

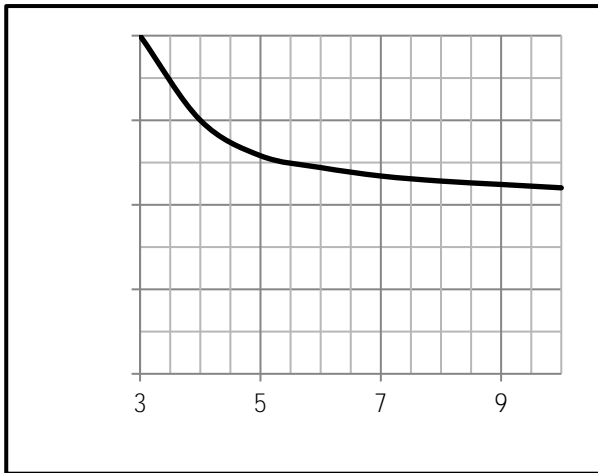


Fig.8 On-Resistance V.S Junction Temperature

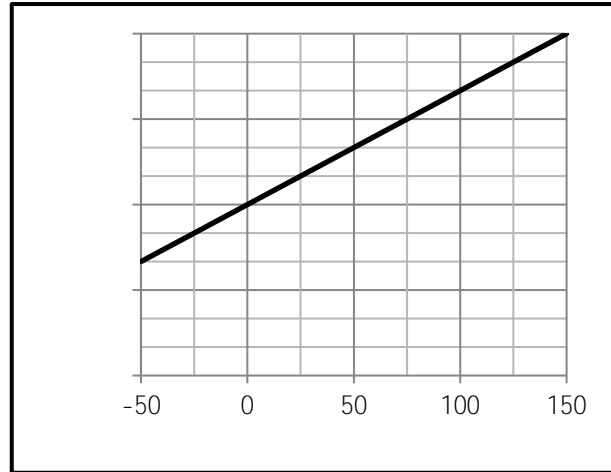


Fig.9 Switching Time Measurement Circuit

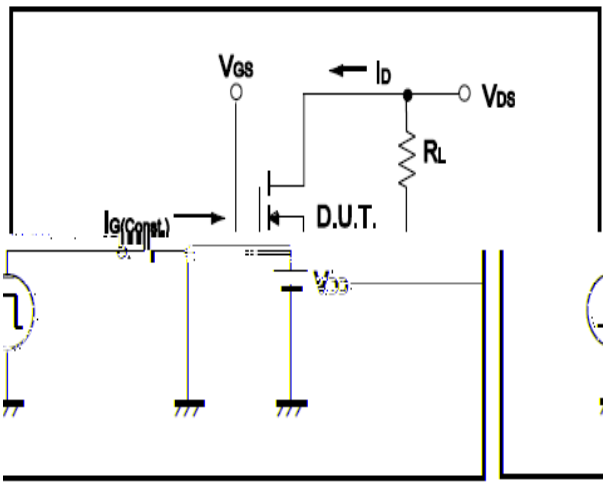


Fig.10 Gate Charge Waveform

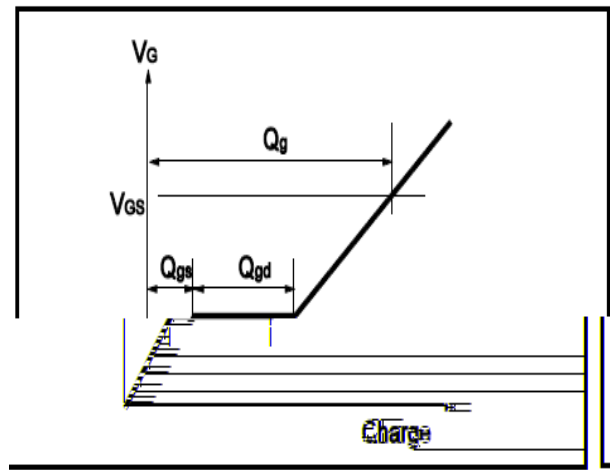


Fig.11 Switching Time Measurement Circuit

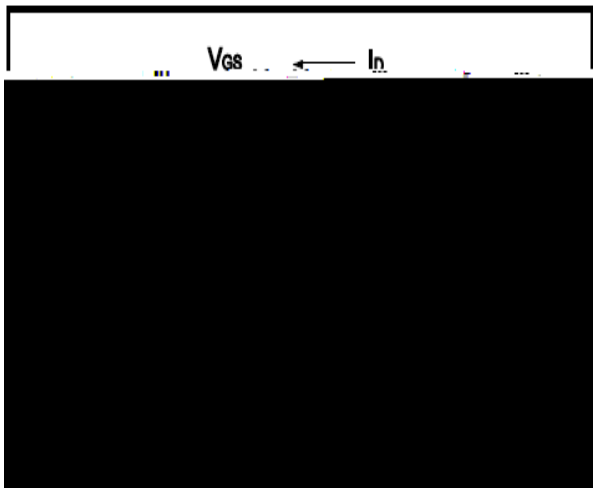


Fig.12 Gate Charge Waveform

