



The ZMS035N08HB combines advanced trench MOSFET technology with a low resistance package to provide

**T<sub>C</sub> =25**

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V <sub>DS</sub>	80	V
Gate-Source Voltage	V <sub>GS</sub>	±20	V
Continuous Drain Current	I <sub>D@TC=25</sub>	140	A
	I <sub>D@TC=75</sub>	106.4	A
	I <sub>D@TC=100</sub>	88.2	A
Pulsed Drain Current	I <sub>DM</sub>	320	A
Total Power Dissipation(TC=25 )	P <sub>D@TC=25</sub>	150	W
Operating Junction Temperature	T <sub>J</sub>	-55 to 150	
Storage Temperature	T <sub>STG</sub>	-55 to 150	
Single Pulse Avalanche Energy@L=0.1mH	E <sub>AS</sub>	125	mJ
Avalanche Current@L=0.1mH	I <sub>AS</sub>	50	A

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	$R_{thJC}$	-	-	0.75	° C/W
Thermal resistance, junction - ambient	$R_{thJA}$	-	-	70	° C/W
Soldering temperature, wavesoldering for 10s	$T_{sold}$	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D=250\mu A$	80			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS}=V_{DS}, I_D=250\mu A$	2		4	V
Drain-Source Leakage Current	$I_{DSS}$	$V_{DS}=80V, V_{GS}=0V$			1.0	$\mu A$
Gate- Source Leakage Current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0V$			100	nA
Static Drain-source On Resistance	$R_{DS(ON)}$	$V_{GS}=10V, I_D=30A$				
Forward Transconductance	$g_{FS}$	$V_{DS}=10V, I_D=40A$				
Source-drain voltage	$V_{SD}$	$I_S=30A$				

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	$C_{iss}$	$f = 1MHz$	-	3100	-	$\mu F$



Fig.1 Gate-Charge Characteristics

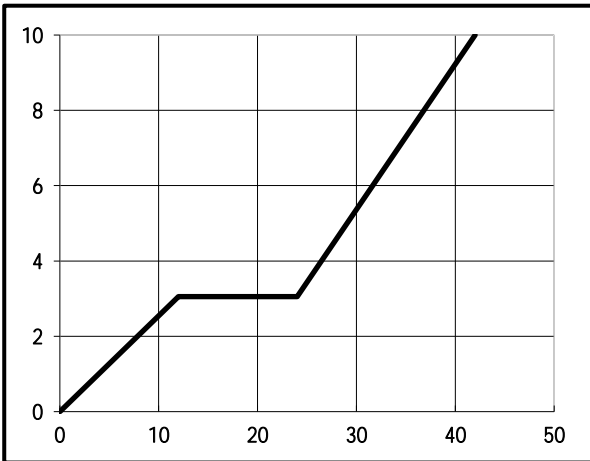


Fig.2 Capacitance Characteristics

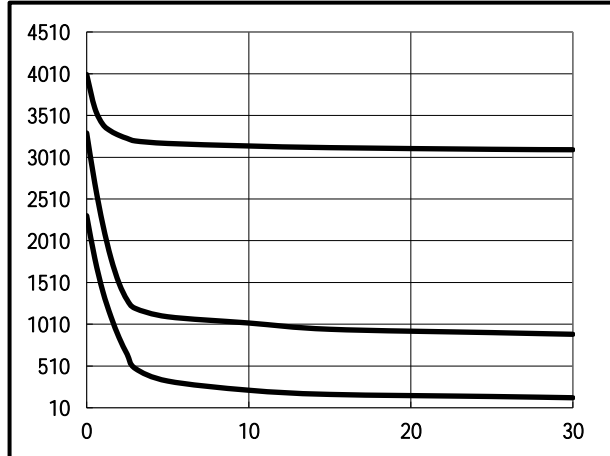


Fig.3 Power Dissipation

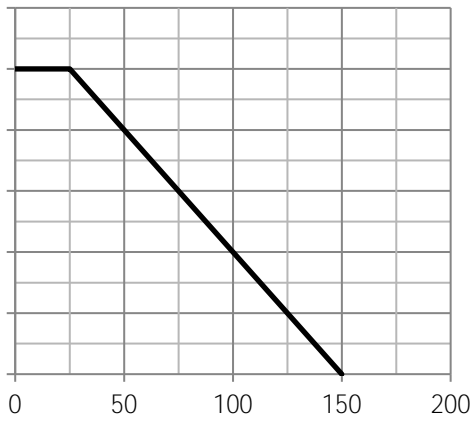


Fig.4 Typical output Characteristics

Fig.5 Threshold Voltage V.S Junction Temperature

Fig.6 Resistance V.S Drain Current



Fig.7 On-Resistance VS Gate Source Voltage

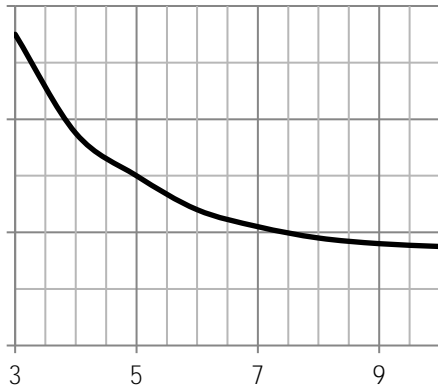


Fig.8 On-Resistance V.S Junction Temperature

Fig.9 Switching Time Measurement Circuit

Fig.10 Gate Charge Waveform

Fig.11 Switching Time Measurement Circuit

Fig.12 Gate Charge Waveform



**Dimensions (TO-263)**

Unit mm