Product Summary

The ZMS100N10N combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.

V_{DS} =100V

$R_{DS(ON)}$ =10mΩ

[illegible]

Trench technology

DS(ON) to minimize conductive loss

nd Synchronous Rectifier

Tc =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	50	A
	$I_{D@}$TC=75	38	A
	$I_{D@}$TC=100	31	A
Pulsed Drain Current	I_{DM}	150	A
Total Power Dissipation	P_D@TC=25	125	W
Total Power Dissipation	P_D@TA=25	2.5	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}	29	mJ

Fig.1 Gate-Charge Characteristics

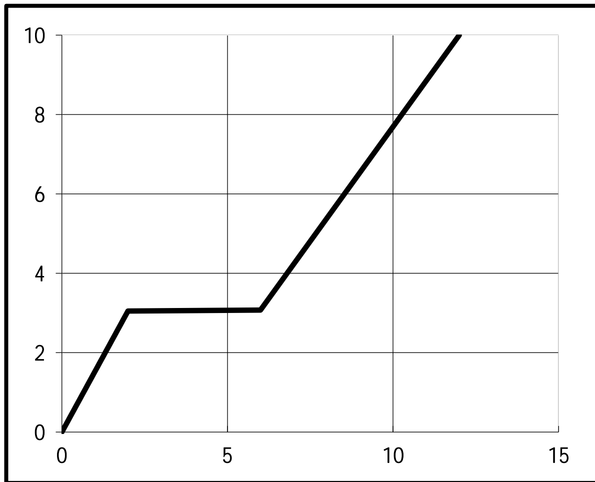


Fig.2 Capacitance Characteristics

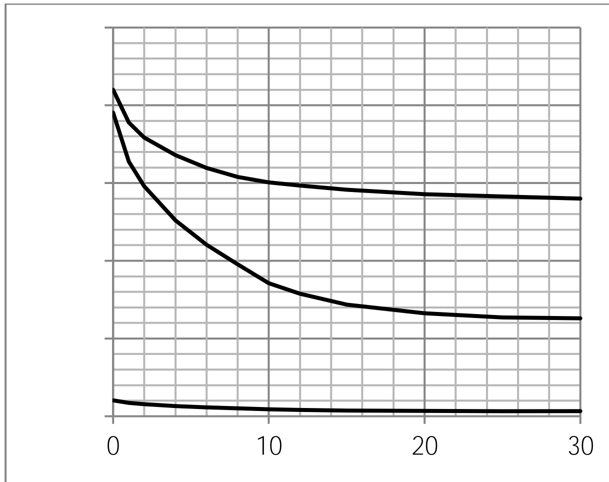


Fig.3 Power Dissipation

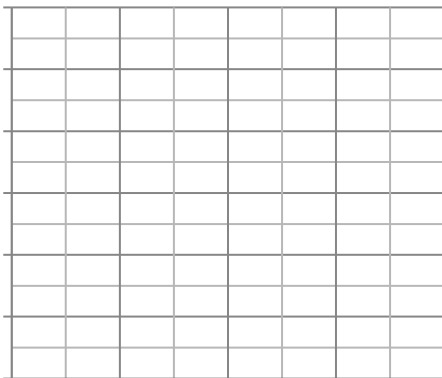


Fig.4 Typical output Characteristics

Fig.5 Threshold Voltage V.S Junction Temperature

Fig.6 Resistance V.S Drain Current

Fig.7 On-Resistance VS Gate Source Voltage

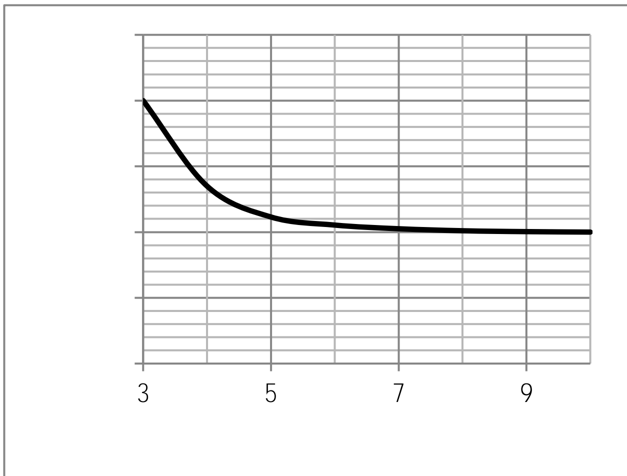


Fig.8 On-Resistance V.S Junction Temperature

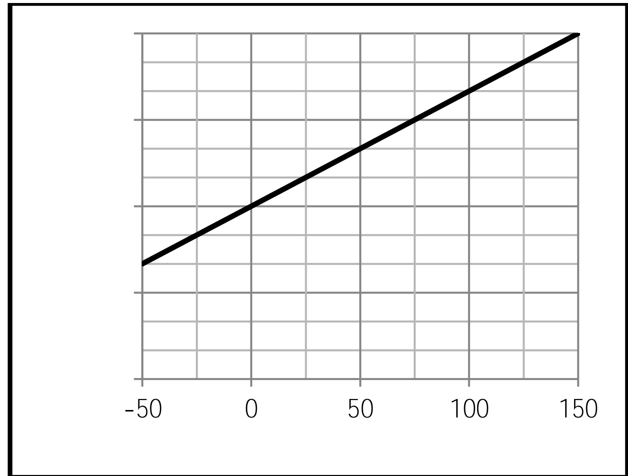


Fig.9 Switching Time Measurement Circuit

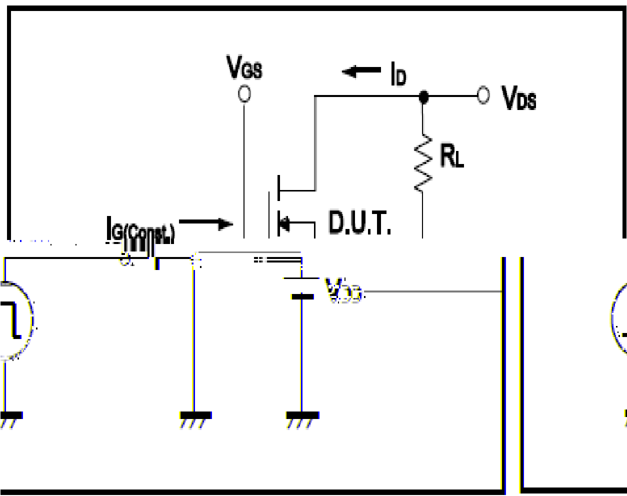


Fig.10 Gate Charge Waveform

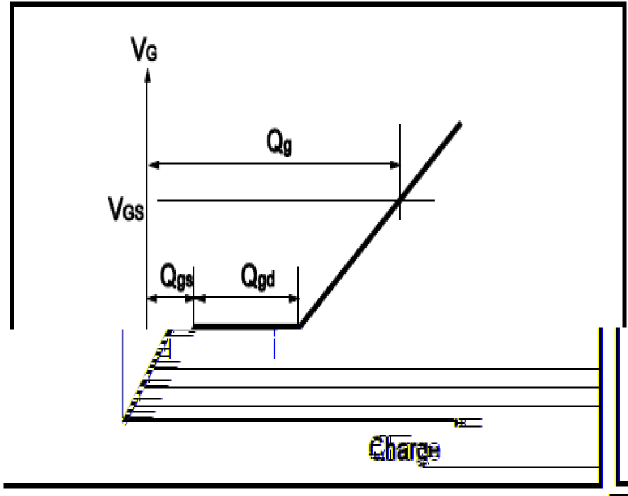


Fig.11 Switching Time Measurement Circuit

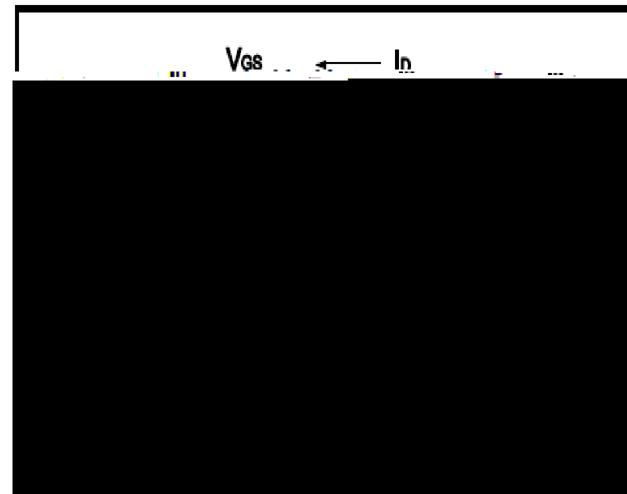
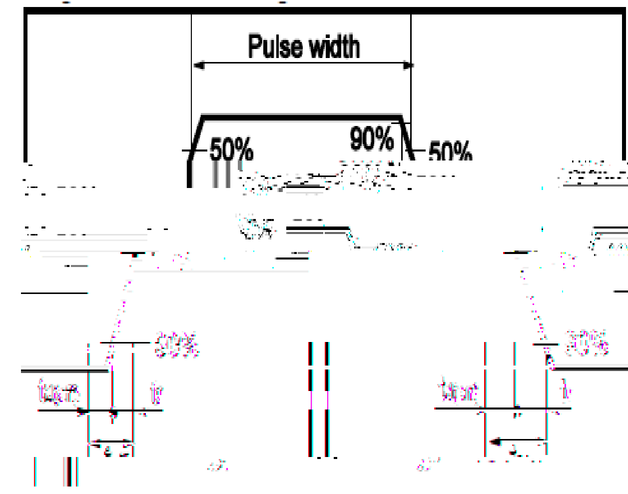
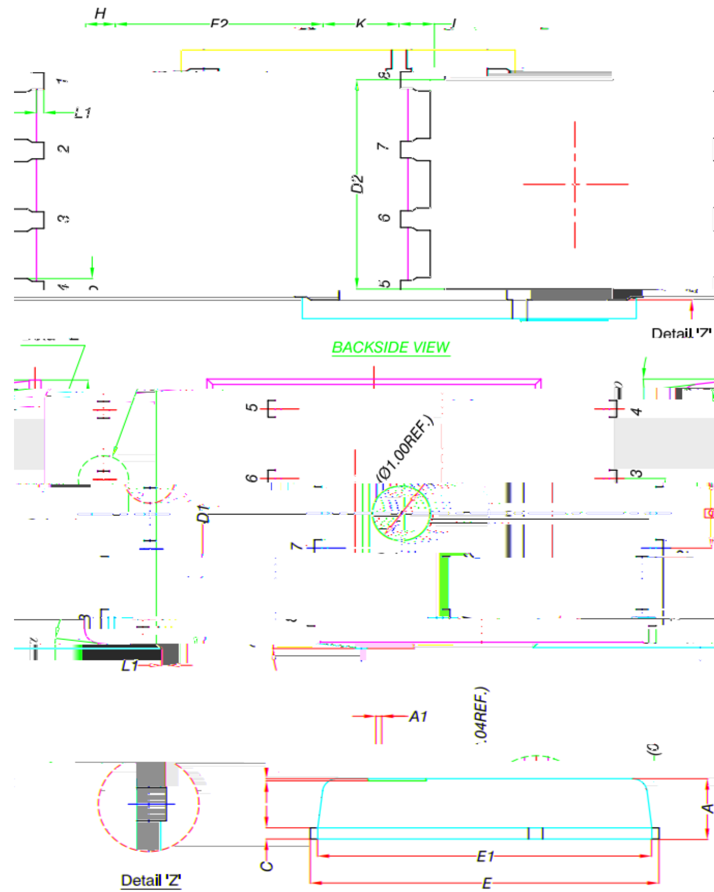


Fig.12 Gate Charge Waveform



sions DFN5×6

Unit mm



DIM.	MILLIMETERS		
	MIN.	NOM.	MAX.
A	0.90	1.00	1.10
A1	0	--	0.05
b	0.33	0.41	0.51
c	0.20	0.25	0.30
D	4.80	4.90	5.00
D2	3.61	3.81	3.96
[illegible]	[illegible]	[illegible]	[illegible]
E1	5.70	5.75	5.80
E2	3.38	3.58	3.78
e		1.27 BSC	
H	0.41	0.51	0.61
K		1.10	
L	0.51	0.61	0.71
L1	0.06	0.13	0.20
θ	6°		12°