H

The ZMS030N06D combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.

device constructure

$_{DS(ON)}$ to minimize conduction loss

Product Summary

E

Synchronous Rectification for AC-DC/DC-DC converter

Oring switches

Power Tools

M

	REEL TAPE
	2500

E T_C =25

Parameter	**Symbol**	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	$I_{D@}$TC=25	90	A
	$I_{D@}$TC=75	68	A
	$I_{D\ @}$TC=100	57	A
Pulsed Drain Current	I_{DM}	270	A
Total Power Dissipation	P_D@TC=25	60	W
Total Power Dissipation	P_D@TA=25	2.0	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

Fig.1 Gate-Charge Characteristics

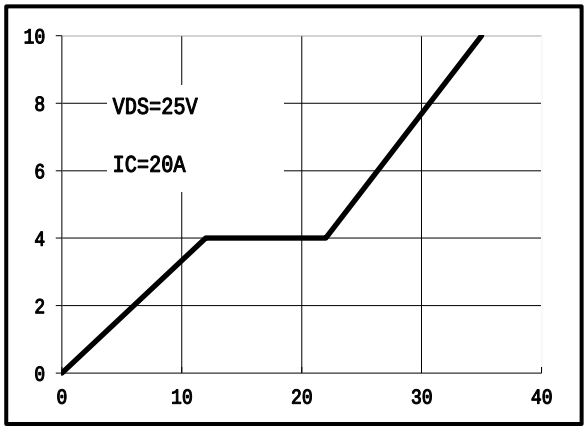


Fig.2 Capacitance Characteristics

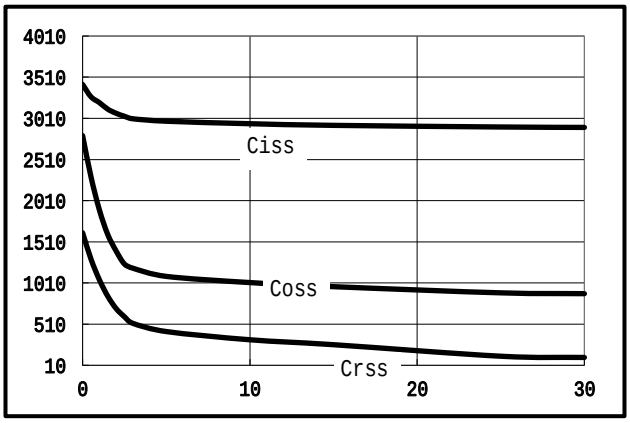


Fig.3 Power Dissipation

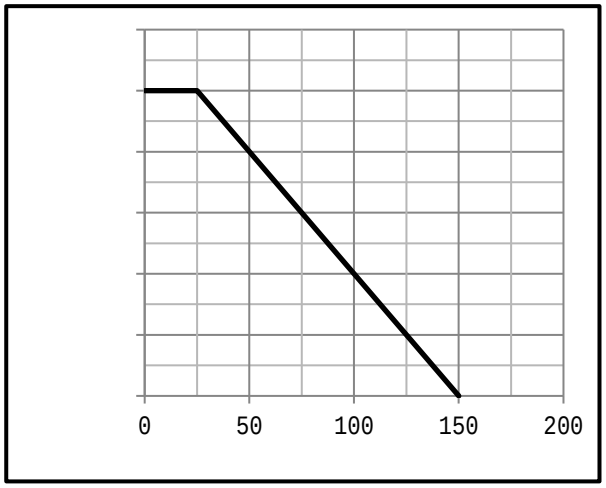


Fig.4 Typical output Characteristics

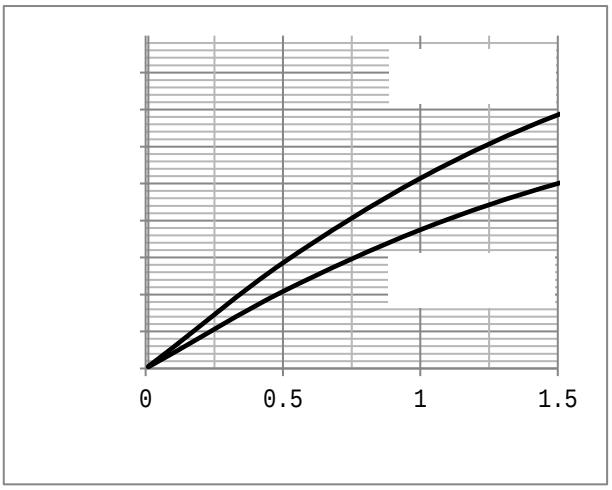


Fig.5 Threshold Voltage V.S Junction Temperature

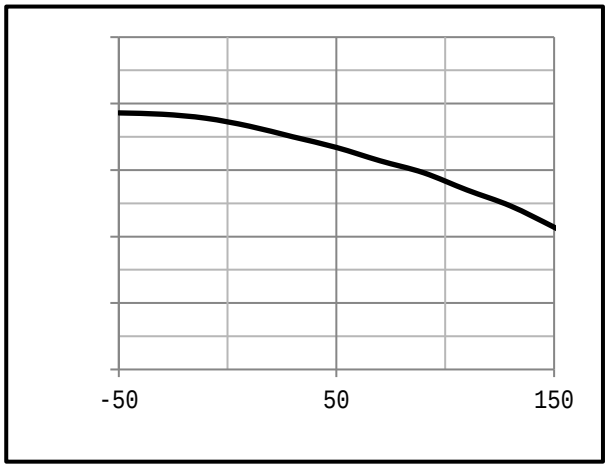
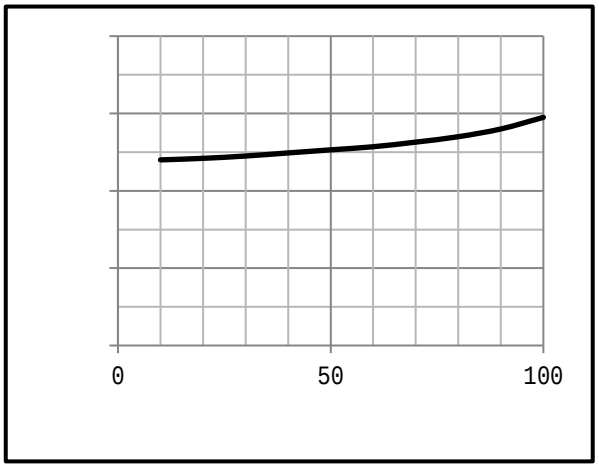
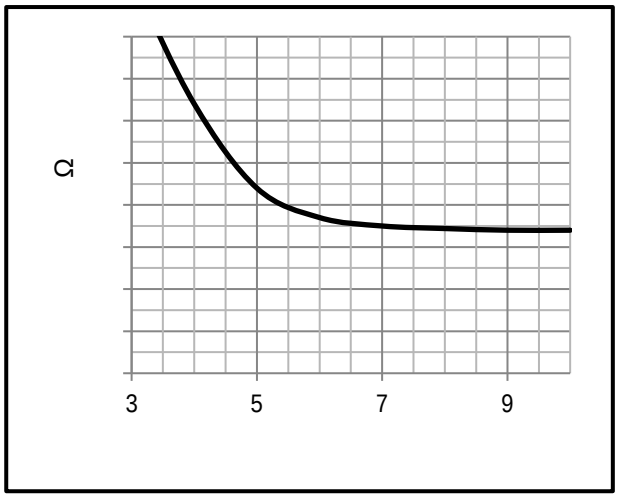


Fig.6 Resistance V.S Drain Current





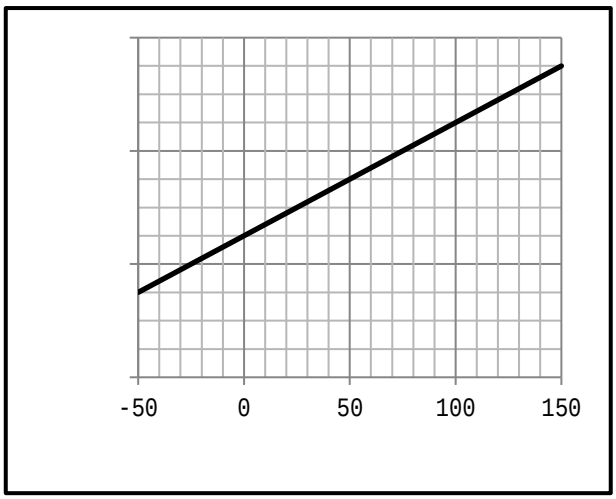
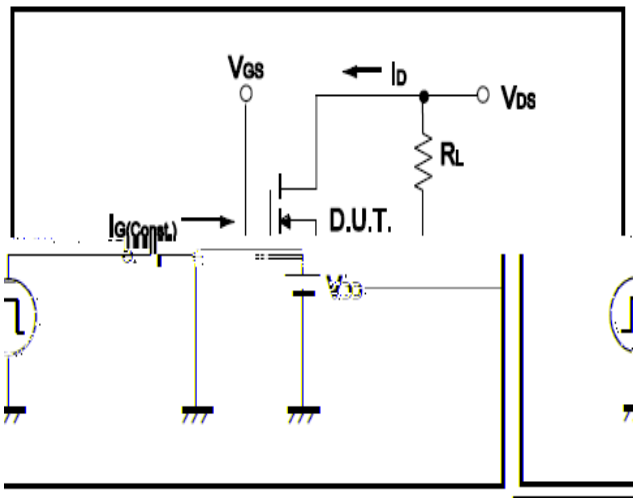


Fig.9 Switching Time Measurement Circuit

Fig.10 Gate Charge Waveform



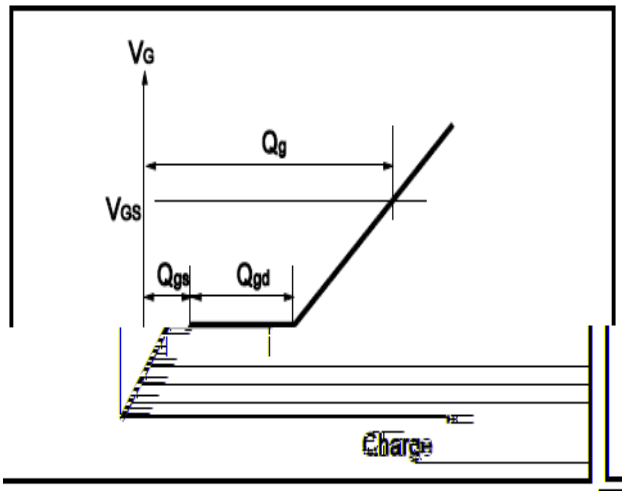
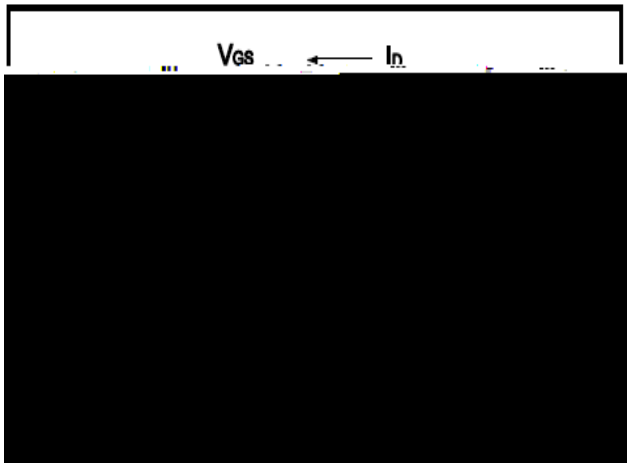
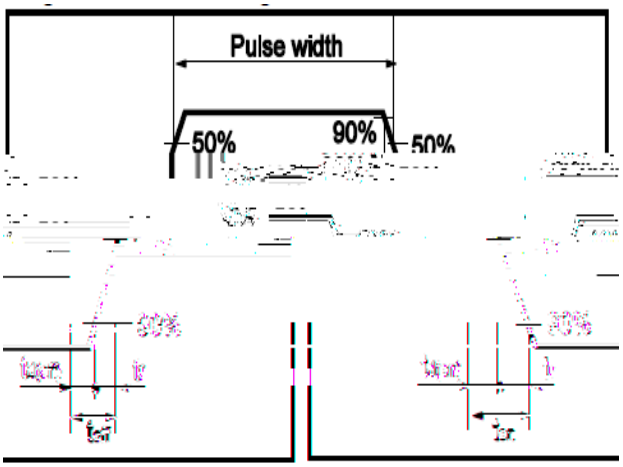


Fig.11 Switching Time Measurement Circuit

Fig.12 Gate Charge Waveform





Dimensions (TO-252)

Unit mm

SYMBOL	min	max	SYMBOL	min	max
A	2.10	2.50	B	0.85	1.25
b	0.50	0.80	b1	0.50	0.90
b2	0.45	0.70	C	0.45	0.70
D	6.30	6.75	D1	5.10	5.50
E	5.30	6.30	e1	2.25	2.35
L1	9.20	10.60	e2	4.45	4.75
L2	0.90	1.75	L3	0.60	1.10
K	0.00	0.23