



**Product Summary**

The ZMS030N06HB combines advanced trench MOSFET technology with a low resistance package to provide extremely low  $R_{DS(ON)}$ .



device constructure

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



Synchronous Rectification for AC-DC/DC-DC

converter

Oring switches

Power Tools

Part NO.	
Marking	
Packing Information	REEL TAPE
Basic ordering unit (pcs)	500

**$T_C = 25$**

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	60	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_{D@TC=25}$	150	A
	$I_{D@TC=75}$	114	A
	$I_{D@TC=100}$	94	A
Pulsed Drain Current	$I_{DM}$	400	A
Total Power Dissipation( $TC=25$ )	$P_{D@TC=25}$	150	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



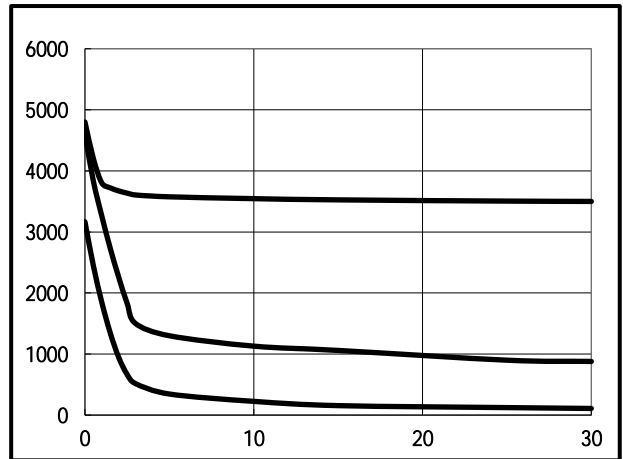
**Thermal resistance**

**Parameter**

**Symbol**



Fig.



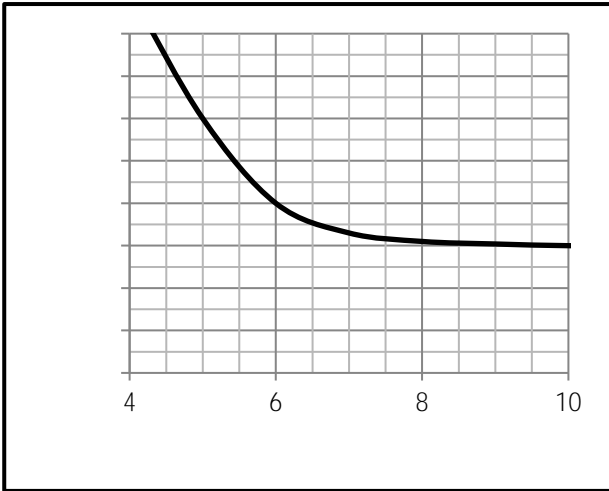


Fig.9 Switching Time Measurement Circuit

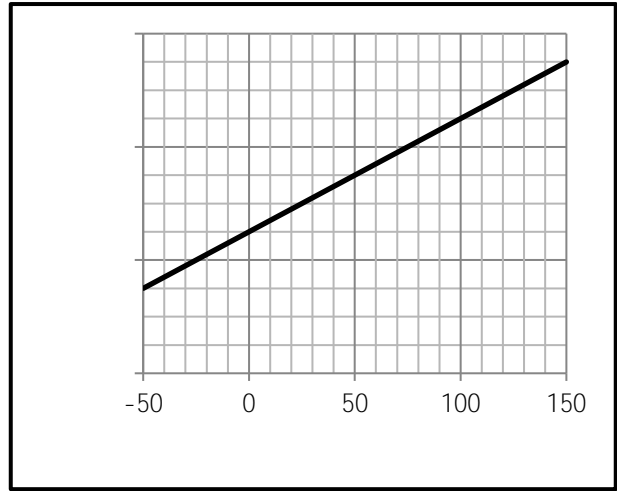


Fig.10 Gate Charge Waveform

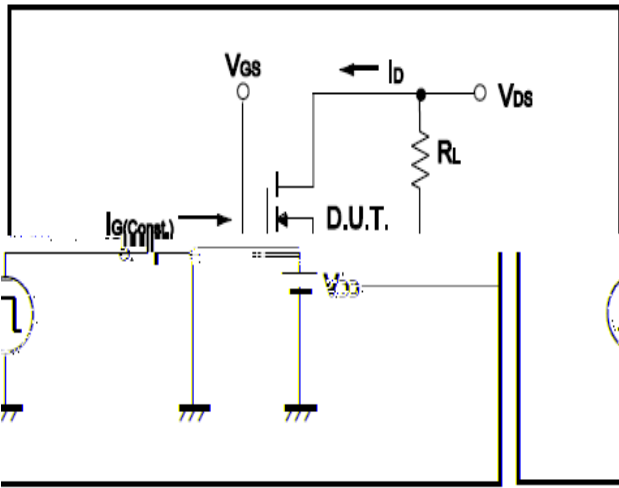


Fig.11 Switching Time Measurement Circuit

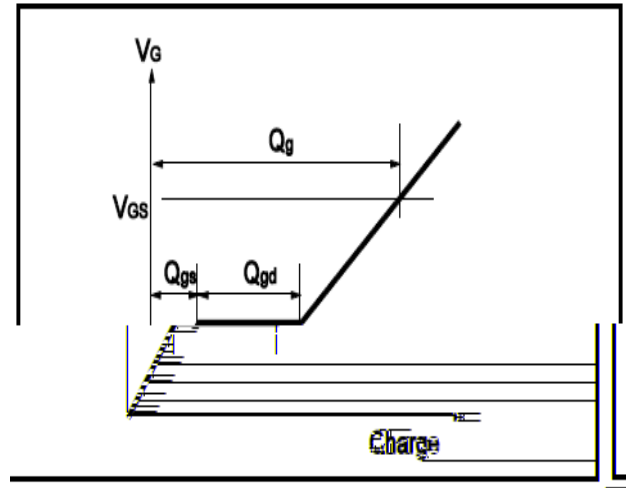
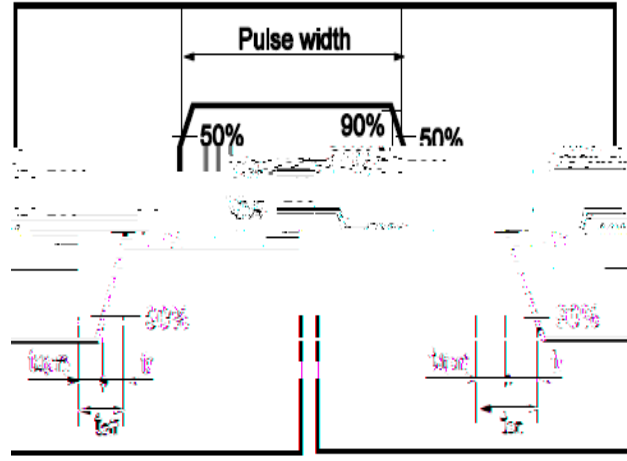
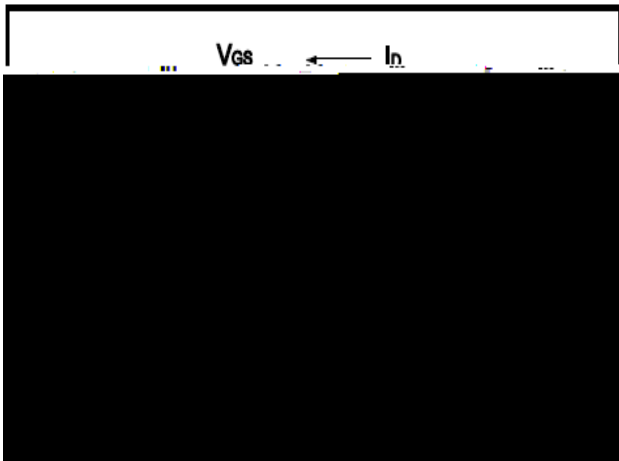


Fig.12 Gate Charge Waveform





Dimensions (TO-220)

Unit mm

SYMBOL	MIN	TYP	MAX	SYMBOL	MIN	TYP	MAX
A	4.42		4.72	E	8.99		9.29
B	1.22		1.32	e1	2.44		2.64
b	0.76		0.86	e2	4.98		5.18
b1	1.22		1.32	L1	15.19		15.79
b2	0.33		0.43	L2	2.29		2.79
C	1.22		1.32	L3	1.3		1.75
D	9.95		10.25				

