



Product Summary

The ZM031N04P combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.



Trench technology

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

nd Synchronous Rectifier



Part NO.	ZM031N04P
Marking	ZM031N04
Packing Information	Bulk Tube
Basic ordering unit (pcs)	500

$T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@TC=25}$	150	A
	$I_{D@TC=75}$	114	A
	$I_{D@TC=100}$	94.5	A
Pulsed Drain Current	I_{DM}	320	A
Total Power Dissipation($TC=25$)	$P_D@TC=25$	100	W
Total Power Dissipation($TA=25$)	$P_D@TA=25$	3.5	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy@ $L=0.1$ mh	E_{AS}	180	mJ





Fig.7 Switching Time Measurement Circuit

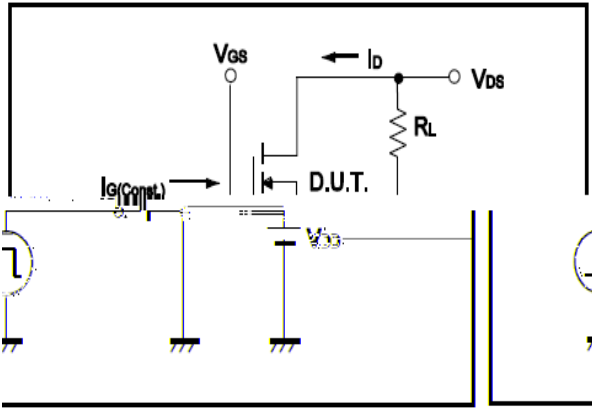


Fig.8 Gate Charge Waveform

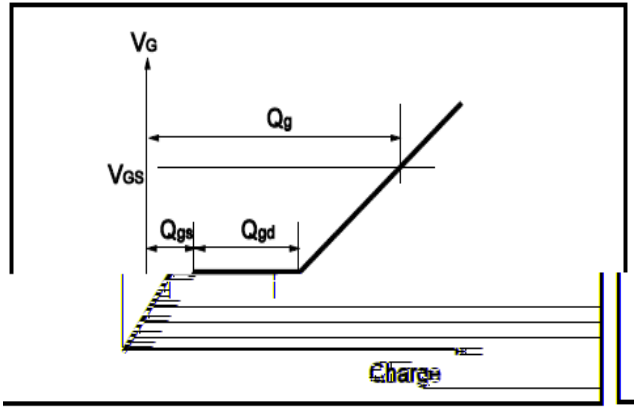


Fig.9 Switching Time Measurement Circuit

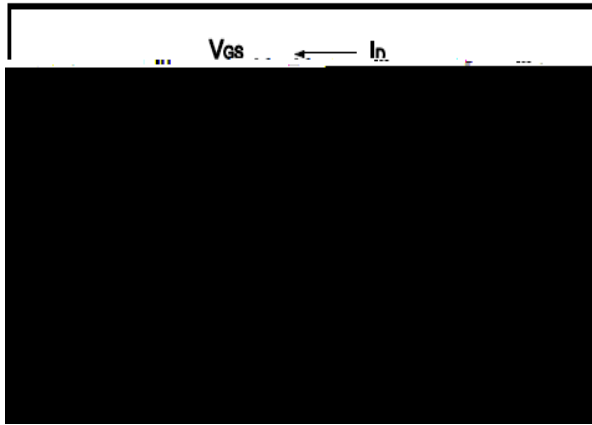


Fig.10 Gate Charge Waveform

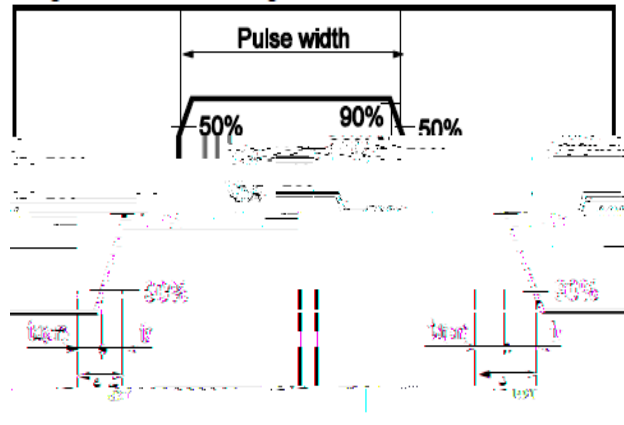


Fig.11 Avalanche Measurement Circuit

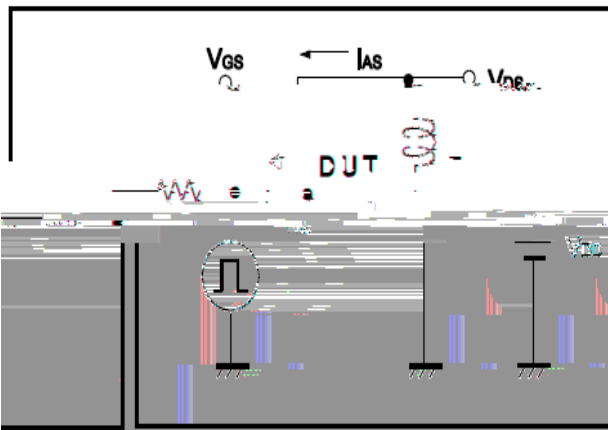
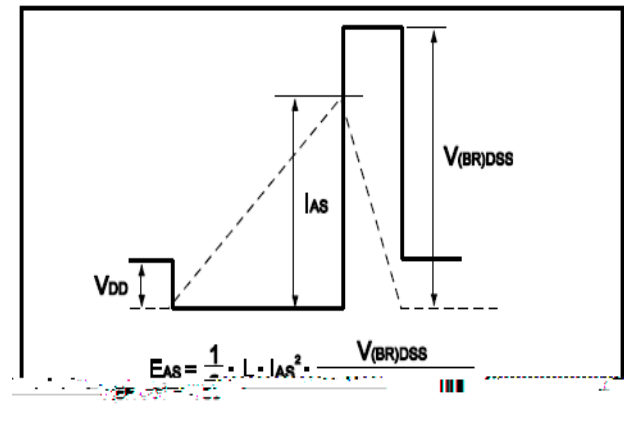


Fig.12 Avalanche Waveform





(TO-220)

Unit mm

	2..		2
	0.		.			0 2	
	..		2.		.		2
	.		..		0 .		2 .
	. 1		.		1..	1 .	2..
	..		.		0 .		1..
	.		.		0..		1..
					1 .		1 .

