



**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	$V_{GS}$	$\pm 20$	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@ $L=0.1mh$	$E_{AS}$	180	mJ







Fig.7 Switching Time Measurement Circuit

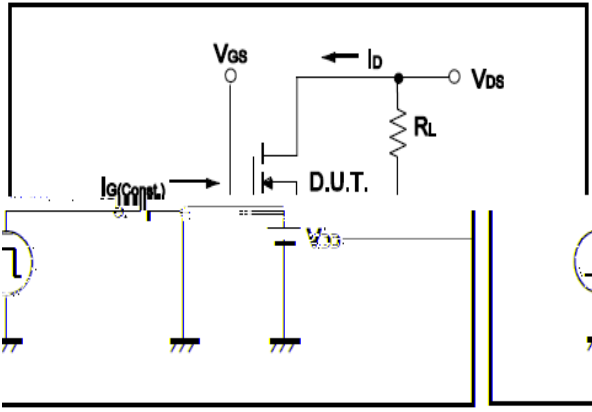


Fig.8 Gate Charge Waveform

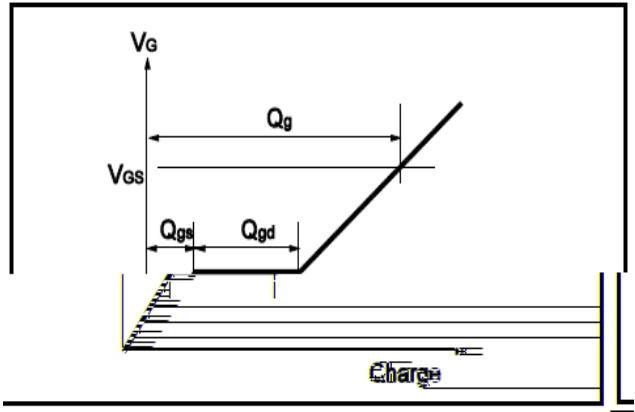


Fig.9 Switching Time Measurement Circuit

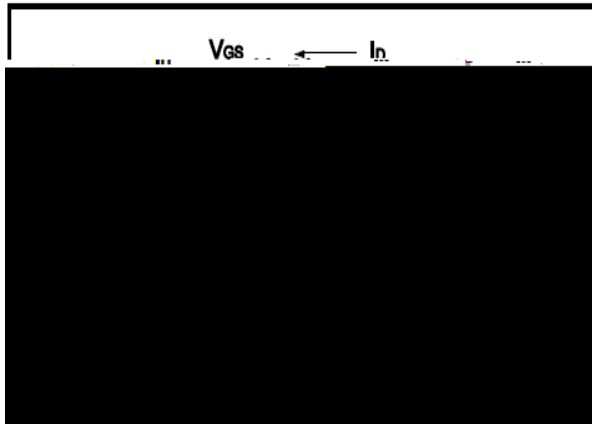


Fig.10 Gate Charge Waveform

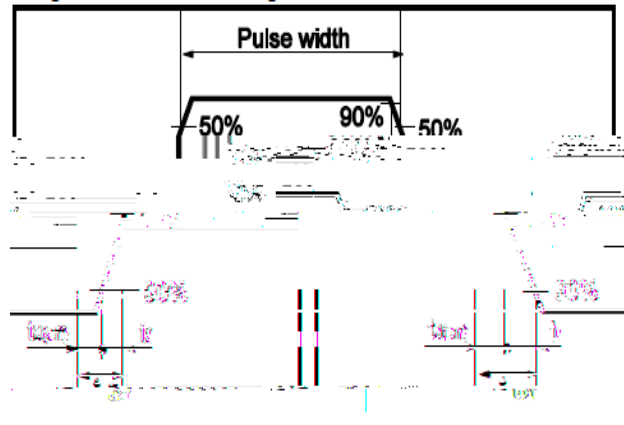


Fig.11 Avalanche Measurement Circuit

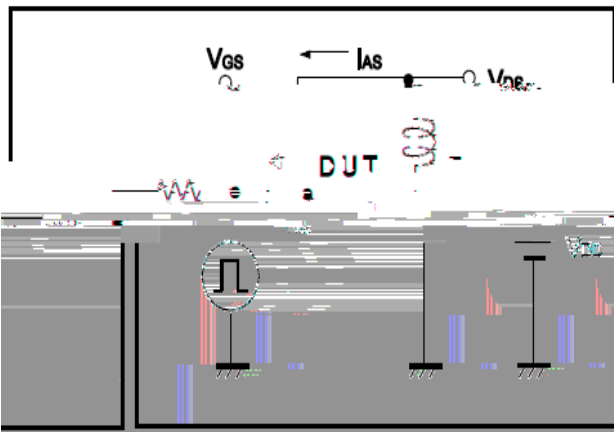
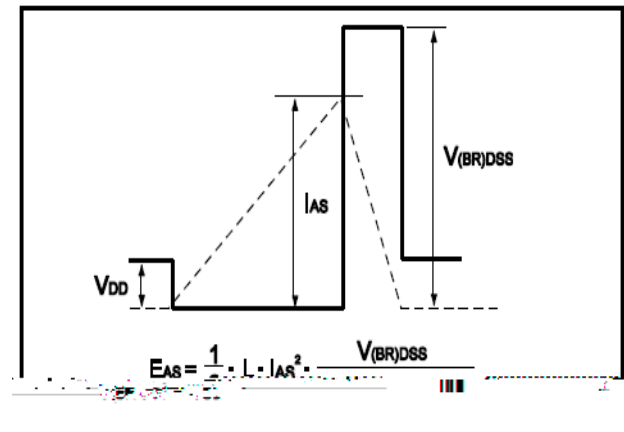


Fig.12 Avalanche Waveform





(TO-220)

Unit mm

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					1 .		1 .

