The ZM100N02U 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

fast switching

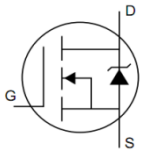
nd Synchronous Rectifier

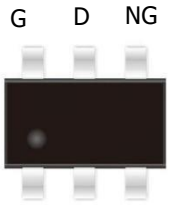
Product Summary

V_{DS} =20V

$R_{DS(ON)}$ =13mΩ

I_D =10A





SOT23-6

Part NO.	ZM100N02U
Marking	ZM100N02
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

T_C =25

Parameter	**Symbol**	Rating	Unit
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current	$I_{D@}$TC=25	10	A
	$I_{D@}$TC=75	7.6	A
	$I_{D@}$TC=100	6.3	A
Pulsed Drain Current	I_{DM}	46	A
Total Power Dissipation	P_D	15	W
Total Power Dissipation(TA=25)	P_D@TA=25	1.3	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	

Fig.7 On-Resistance VS Gate Source Voltage

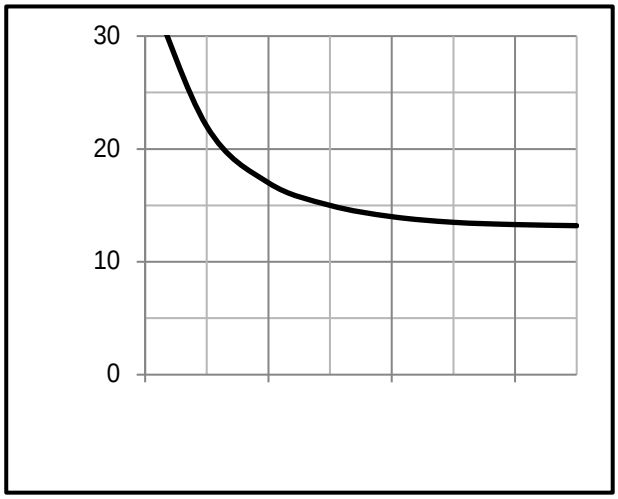


Fig.8 On-Resistance V.S Junction Temperature

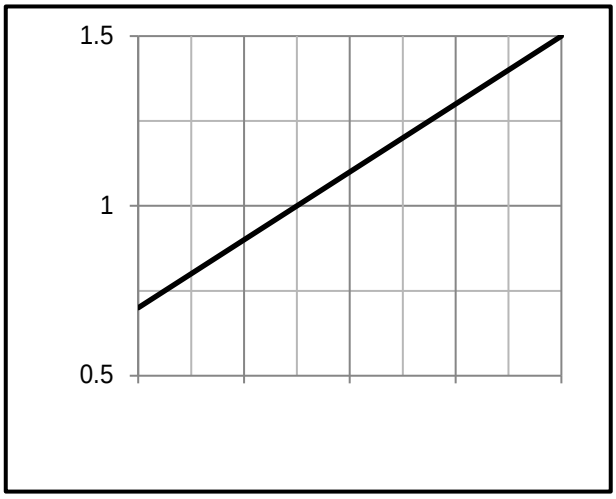


Fig.9 Switching Time Measurement Circuit

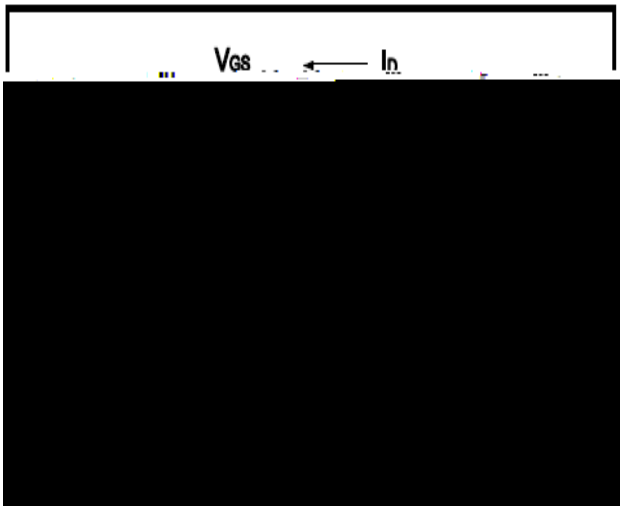


Fig.10 Gate Charge Waveform

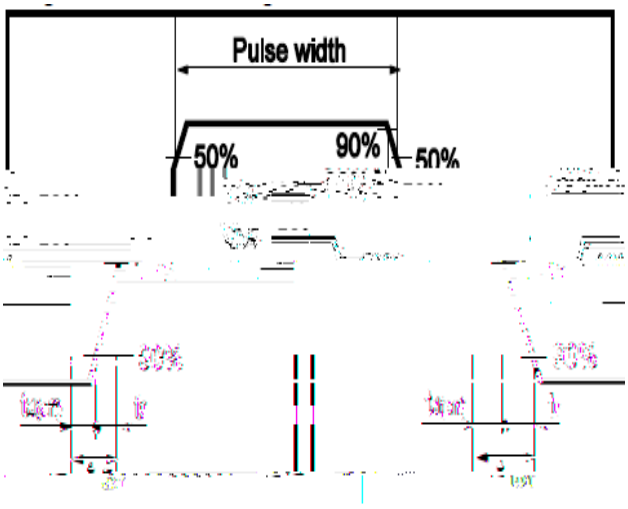


Fig.11 Avalanche Measurement Circuit

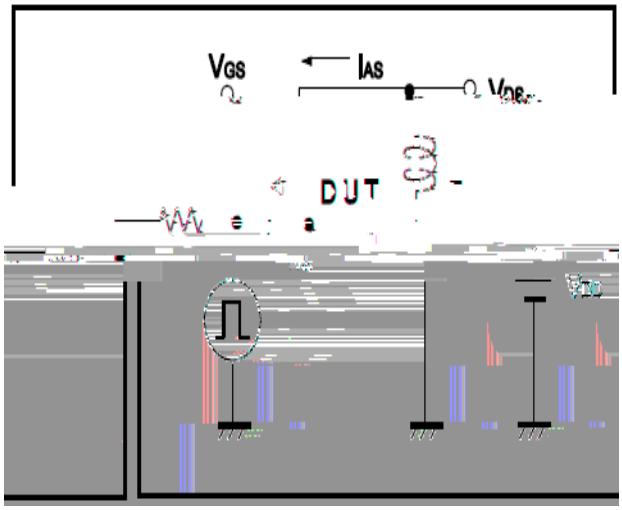


Fig.12 Avalanche Waveform