

General Description

The ZM130P03S combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. This device is ideal for load switch and battery protection applications.

Features

Advance high cell density Trench technology
 $R_{DS(ON)}$ to minimize conductive loss

Application

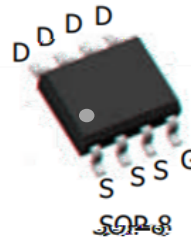
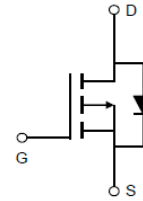
nd Synchronous Rectifier

Product Summary

$$V_{DS} = -30V$$

$$R_{DS(ON)} = 13m$$

$$I_D = -10A$$



□

Ordering Information:

Part NO.	ZM130P03S
Marking	ZM130P03
Packing Information	REEL TAPE
Basic ordering unit (pcs)	4000

□

Absolute Maximum Ratings $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_D @ T_C = 25$	-10	A
	$I_D @ T_C = 75$	-7.6	A
	$I_D @ T_C = 100$	-6.3	A
Pulsed Drain Current	I_{DM}	-30	A
Total Power Dissipation	$P_D @ T_C = 25$	3.6	W
Total Power Dissipation	$P_D @ T_A = 25$	0.69	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy	E_{AS}	100	mJ

Fig.7 Switching Time Measurement Circuit

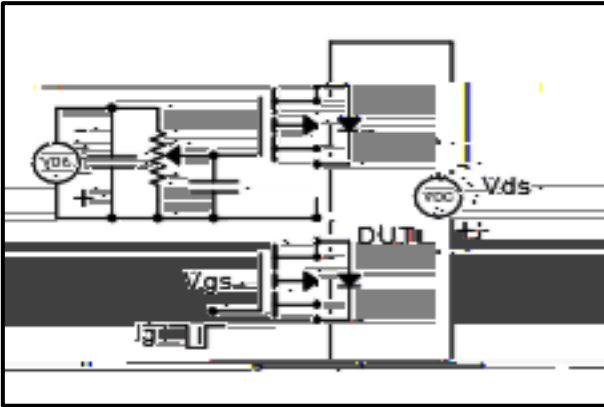


Fig.8 Gate Charge Waveform

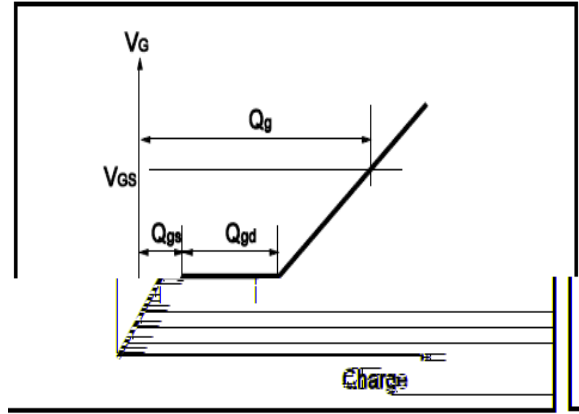


Fig.9 Switching Time Measurement Circuit

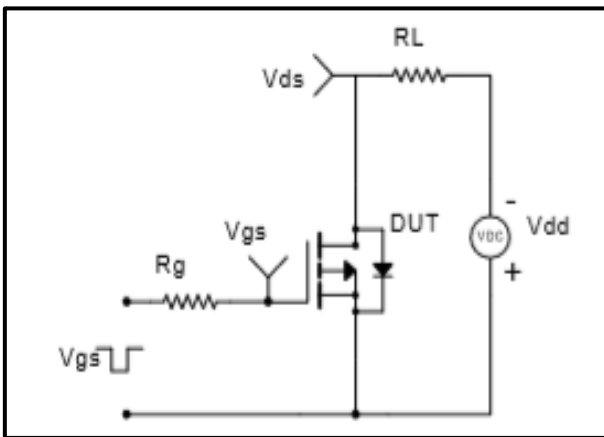


Fig.10 Gate Charge Waveform

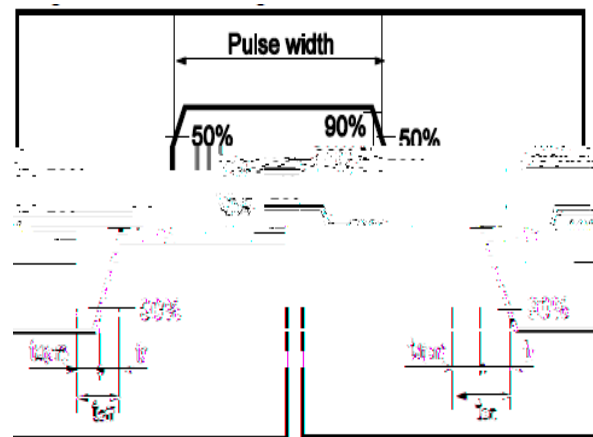


Fig.11 Avalanche Measurement Circuit

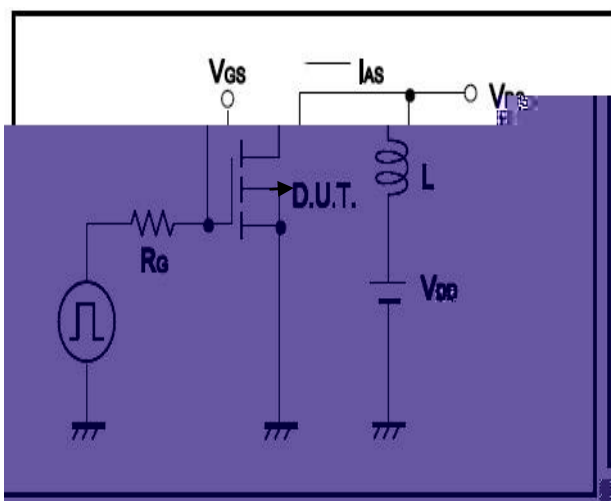
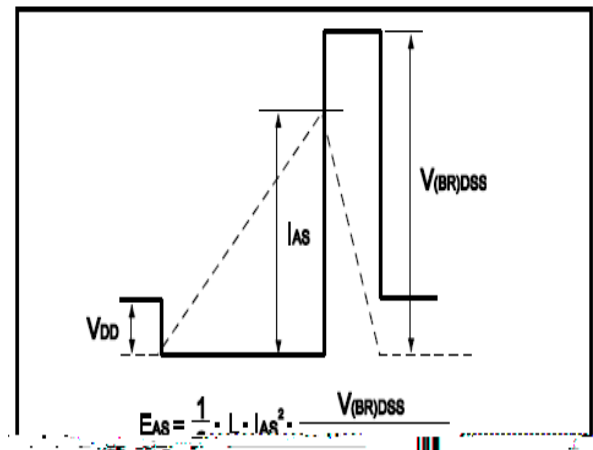


Fig.12 Avalanche Waveform



Dimensions(SOP8)

Unit: mm

SYMBOL	min	TYP	max	SYMBOL	min		max
A	4.80		5.25	C	1.30		1.75
A1	0.37		0.49	C1	0.55		0.75
A2		1.27		C2	0.55		0.65
A3		0.41		C3	0.05		0.20
B	5.80		6.20	C4	0.10	0.20	0.23
B1	3.80		4.10	D		1.05	
B2		5.00		D1	0.40		0.62

