● General Description

The ZMC88304S combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. It combines one N channel MOSFET and one P channel MOSFET.

● Product Summary

● Features

Trench technology

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

Dual DIE in one package

●Application

Power Management in Notebook Computer

BLDC Motor driver

●Ordering Information:

Part NO.	ZMC88304S
Marking	ZMC88304
Packing Information	REEL TAPE

●Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	34	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	180	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

●N Channel 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℃	7	A
	I_D@T_C =75℃	5.3	A
	I_D@T_C=100℃	4.4	A

Fig.1 P ssipation

Fig.2 Typical output Characteristics

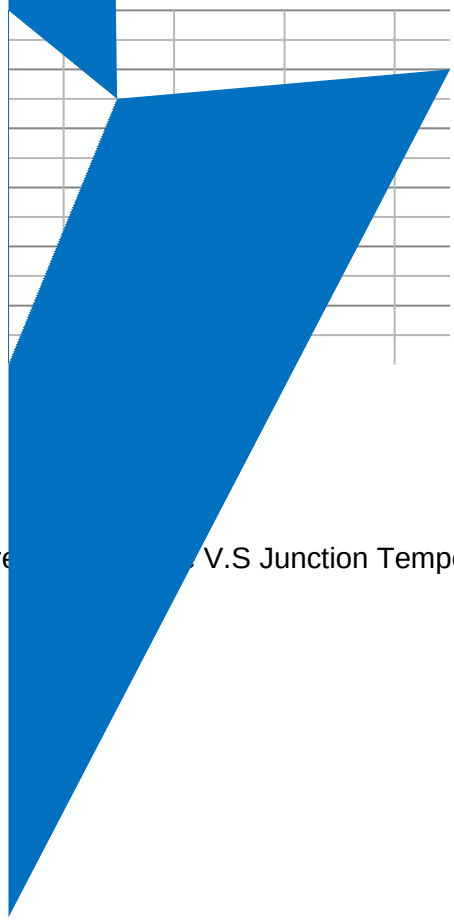


Fig.3 Thre V.S Junction Temperature

Fig.4 Resistance V.S Drain Current

●P Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

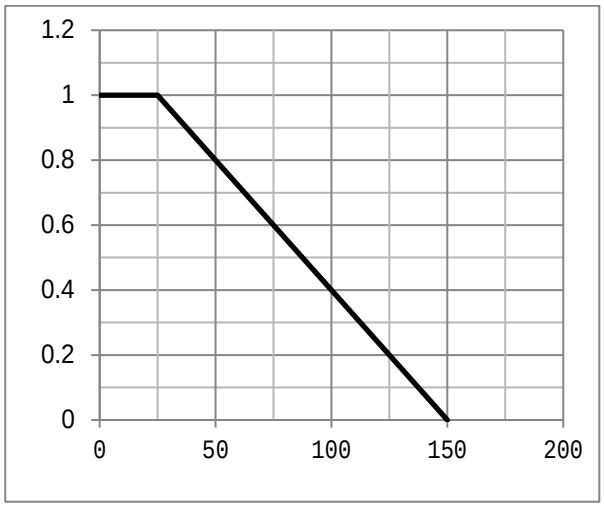


Fig.2 Typical output Characteristics

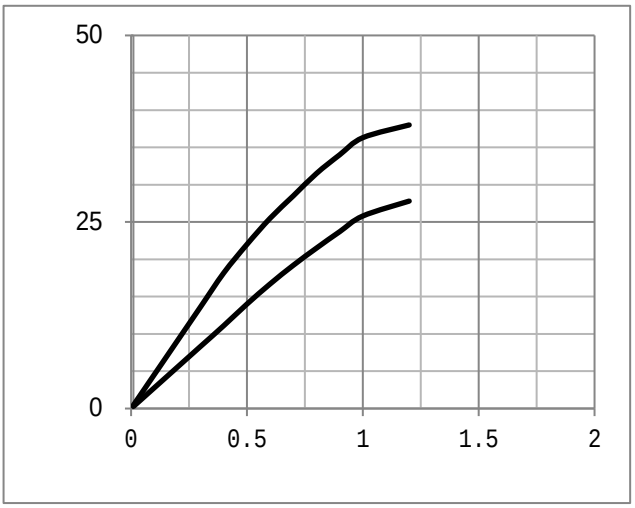


Fig.3 Threshold Voltage V.S Junction Temperature

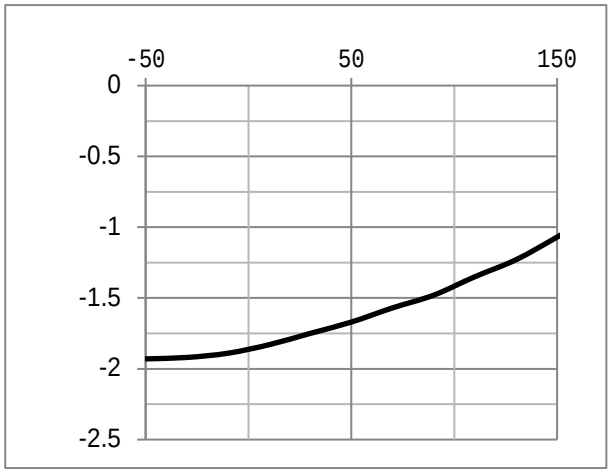
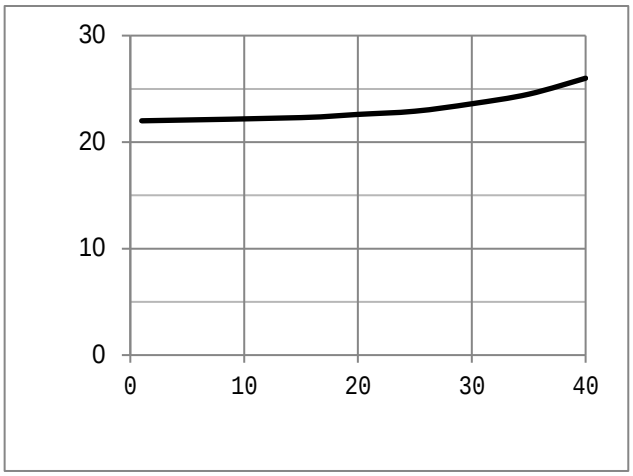
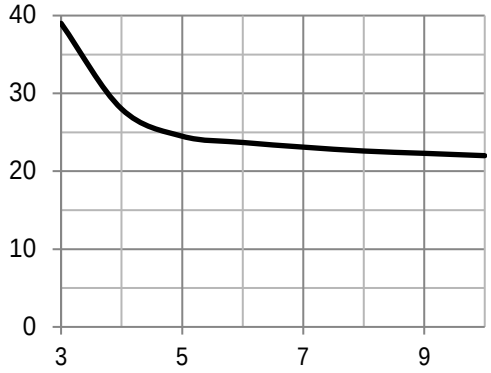


Fig.4 Resistance V.S Drain Current





●Test Circuit

Fig.1 Switching Time Measurement Circuit

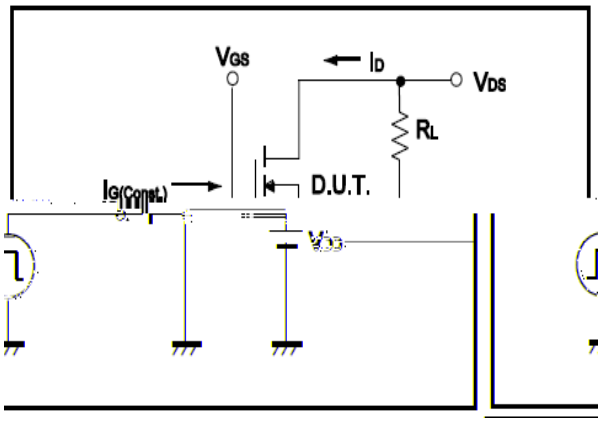


Fig.2 Gate Charge Waveform

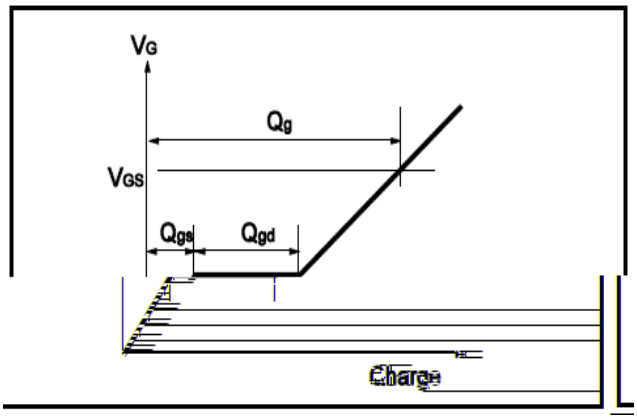


Fig.3 Switching Time Measurement Circuit

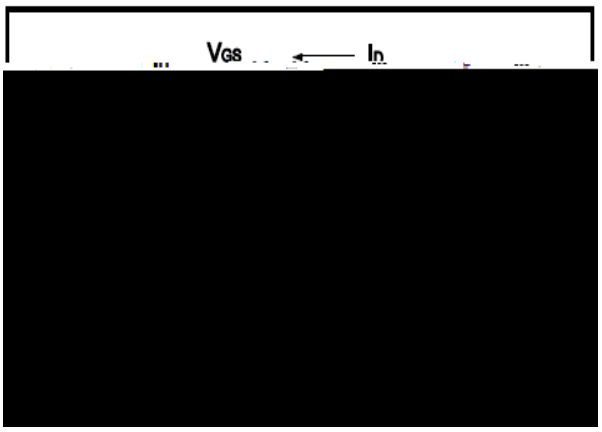


Fig.4 Gate Charge Waveform

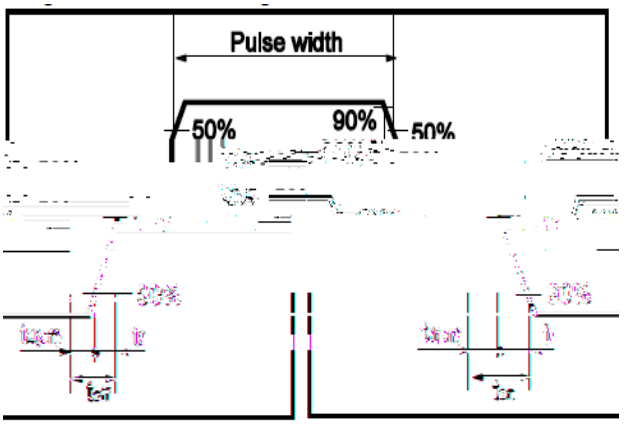


Fig.5 Avalanche Measurement Circuit

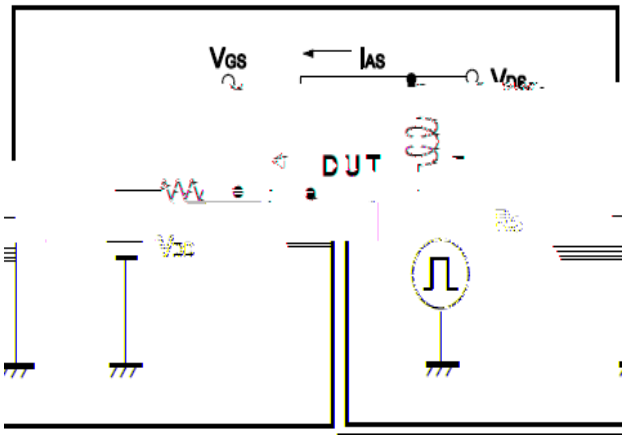
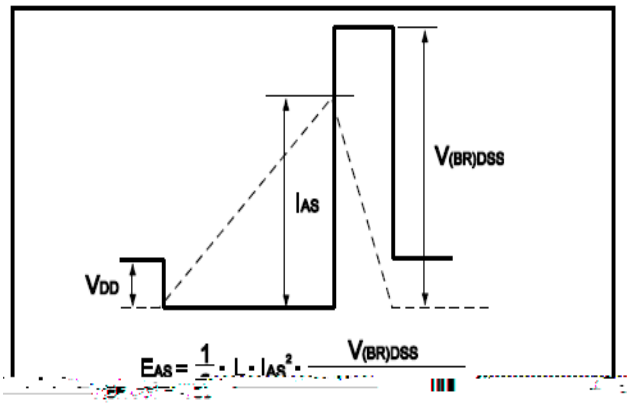
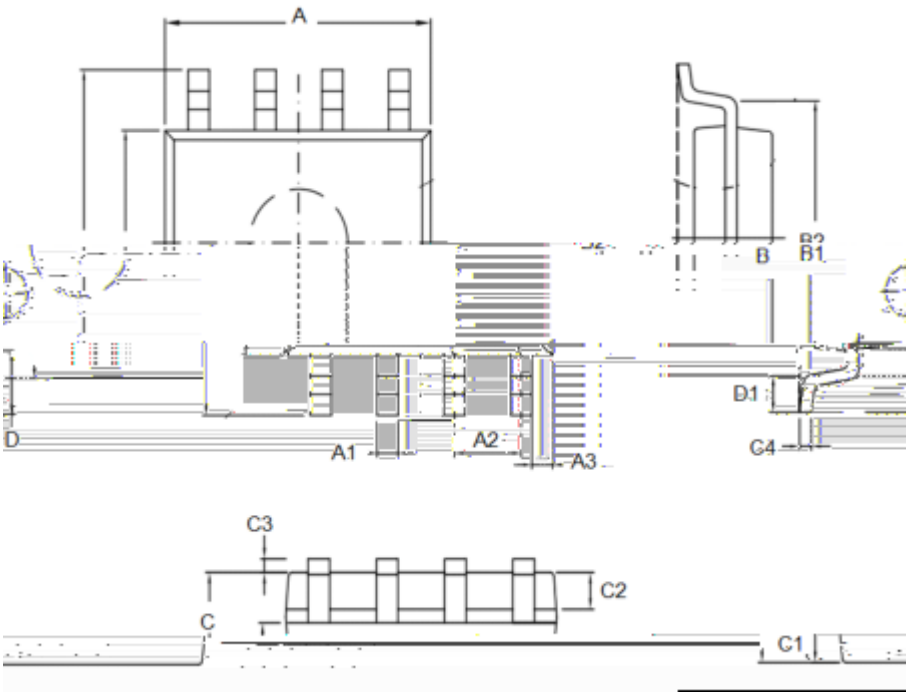


Fig.6 Avalanche Waveform



●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