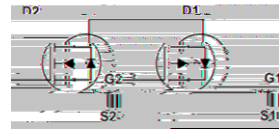


Product Summary

The ZMC88403D 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.



Trench technology

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

fast switching

Dual DIE in one package



Power Management in Notebook Computer

BLDC Motor driver

Part NO.	ZMC88403D
Marking	ZMC88403
Packing Information	REEL TAPE
Basic ordering unit (pcs)	2500

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	2.3	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	62	° 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}	40	V
Gate-Source Voltage	V_{GS}	20	V
Continuous Drain Current	$I_D @ T_C = 25$	30	A
	$I_D @ T_C = 75$	22.8	A
	$I_D @ T_C = 100$	19	A



N Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

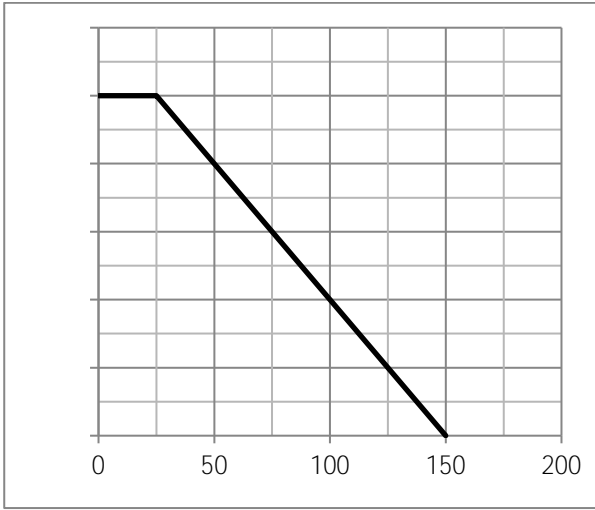


Fig.2 Typical output Characteristics

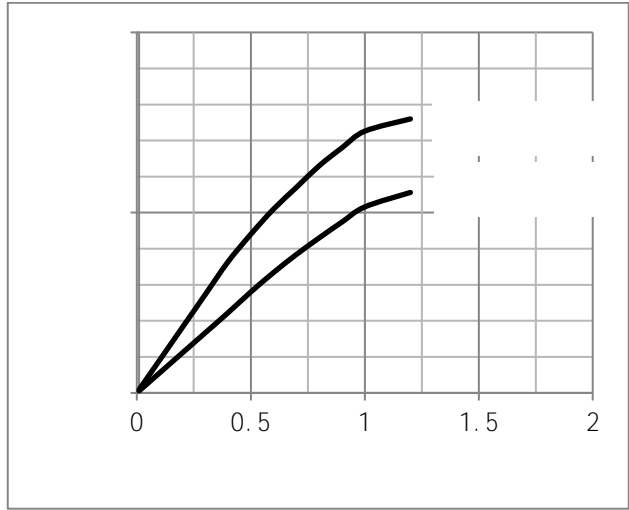


Fig.3 Threshold Voltage V.S Junction Temperature

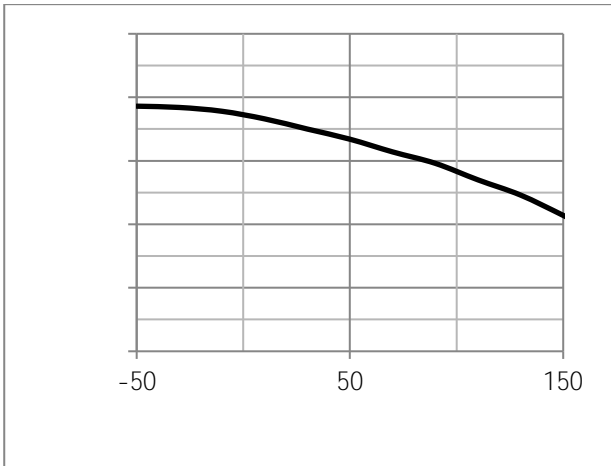
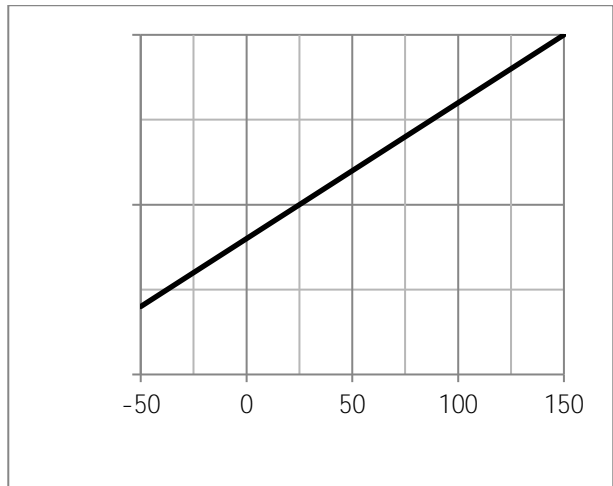
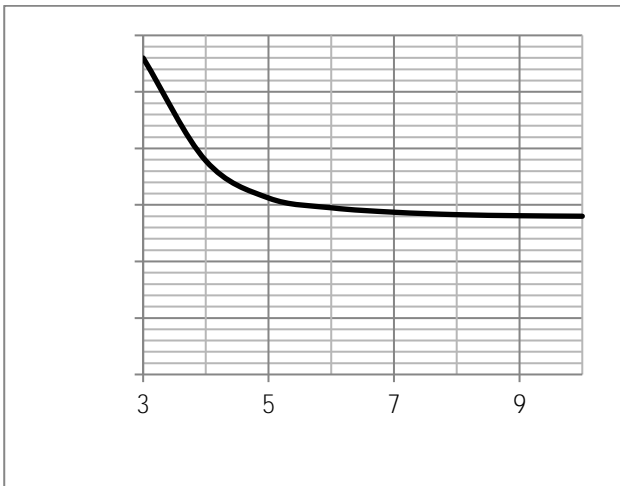
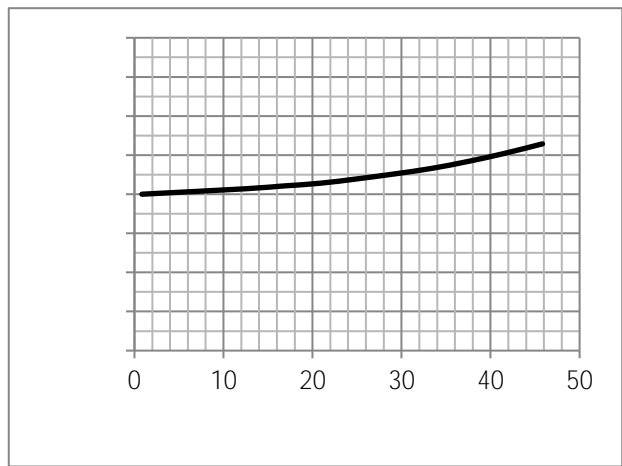


Fig.4 Resistance V.S Drain Current





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



(TO-252-4)

Unit: mm

