

ZXMN10A07F

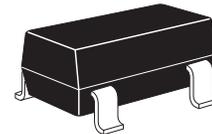
100V N-CHANNEL ENHANCEMENT MODE MOSFET

SUMMARY

$V_{(BR)DSS} = 100V$: $R_{DS(on)} = 0.7\Omega$ $I_D = 0.8A$

DESCRIPTION

This new generation of Trench MOSFETs from TY utilizes a unique structure that combines the benefits of low on-resistance with fast switching speed. This makes them ideal for high efficiency, low voltage power management applications.



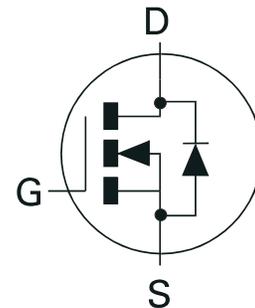
SOT23

FEATURES

- Low on-resistance
- Fast switching speed
- Low threshold
- Low gate drive
- SOT23 package

APPLICATIONS

- DC-DC converters
- Power Management functions
- Disconnect switches
- Motor control



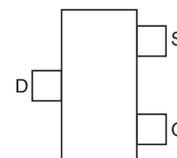
ORDERING INFORMATION

DEVICE	REEL SIZE	TAPE WIDTH	QUANTITY PER REEL
ZXMN10A07FTA	7"	8mm	3000 units
ZXMN10A07FTC	13"	8mm	10000 units

DEVICE MARKING

- 7N1

PINOUT



Top View

ZXMN10A07F

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	LIMIT	UNIT
Drain-Source Voltage	V_{DSS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current @ $V_{GS}=10V$; $T_A=25^\circ C^{(b)}$ @ $V_{GS}=10V$; $T_A=70^\circ C^{(b)}$ @ $V_{GS}=10V$; $T_A=25^\circ C^{(a)}$	I_D	0.8 0.6 0.7	A
Pulsed Drain Current ^(c)	I_{DM}	3.5	A
Continuous Source Current (Body Diode) ^(b)	I_S	0.5	A
Pulsed Source Current (Body Diode) ^(c)	I_{SM}	3.5	A
Power Dissipation at $T_A=25^\circ C^{(a)}$ Linear Derating Factor	P_D	625 5	mW mW/°C
Power Dissipation at $T_A=25^\circ C^{(b)}$ Linear Derating Factor	P_D	806 6.4	mW mW/°C
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	°C

THERMAL RESISTANCE

PARAMETER	SYMBOL	VALUE	UNIT
Junction to Ambient ^(a)	$R_{\theta JA}$	200	°C/W
Junction to Ambient ^(b)	$R_{\theta JA}$	155	°C/W

NOTES

(a) For a device surface mounted on 25mm x 25mm FR4 PCB with high coverage of single sided 1oz copper, in still air conditions

(b) For a device surface mounted on FR4 PCB measured at $t \leq 5$ secs.

(c) Repetitive rating 25mm x 25mm FR4 PCB, $D=0.02$, pulse width 300 μ s - pulse width limited by maximum junction temperature. Refer to Transient Thermal Impedance graph.