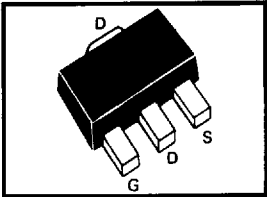


SOT89 P CHANNEL ENHANCEMENT
MODE VERTICAL DMOS FET

ZVP2106Z

FEATURES

- * PARTMARKING DETAIL – ZVP2106Z – P16
- FOR TYPICAL CHARACTERISTICS GRAPHS SEE ZVP2106G DATASHEET.



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-60	V
Continuous Drain Current @ $T_{amb}=25^{\circ}C$	I_D	-0.39	A
Pulsed Drain Current	I_{DM}	-4	A
Gate-Source Voltage	V_{GS}	± 20	V
Max Power Dissipation @ $T_{amb}=25^{\circ}C$	P_{TOT}	1.5	W
Operating And Storage Temperature Range	$tj:tstg$	-65 TO +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (at $T_{amb}=25^{\circ}C$ unless otherwise stated)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BVD_{SS}	-60			V	$I_D=-1mA, V_{GS}=0$
Gate-Source Threshold Voltage	$V_{GS(TH)}$	-1.5		-3.5	V	$I_D=-1mA, V_{DS}=V_{GS}$
Gate Body Leakage	I_{GSS}			-20	nA	$V_{GS}=\pm 20V, V_{DS}=0$
Zero Gate Voltage Drain Current (2)	I_{DSS}			-0.5 -100	μA μA	$V_{DS}=\text{max rating}, V_{GS}=0$ $V_{DS}=0.8 \times \text{max. rating}, V_{GS}=0 (T=125^{\circ}C)$
On-State Drain Current *	$I_{D(ON)}$	-1			A	$V_{DS}=-18V, V_{GS}=-10V$
Static Drain-Source On-State Resistance *	$R_{DS(ON)}$			5	Ω	$I_D=-500mA, V_{GS}=-10V$
Forward Transconductance (2)	G_{FS}	150			mS	$V_{DS}=-18V, I_D=-500mA$
Input Capacitance (2)	C_{ISS}			100	pF	$V_{DS}=-18V,$ $V_{GS}=0$ $f=1MHZ$
Common Source Output Capacitance (2)	C_{OSS}			60	pF	
Reverse Transfer Capacitance (2)	C_{RSS}			20	pF	
Turn-On Delay Time (1) (2)	$T_{D(ON)}$			7	ns	$V_{DD}=-18, I_D=-500mA$
Rise Times (1) (2)	T_R			15	ns	
Turn-Off Delay Time (1) (2)	$T_{D(OFF)}$			12	ns	
Fall Time (1) (2)	T_F			15	ns	

(1) Measured under pulsed conditions. Width=300 μs , Duty cycle $\leq$ 2%
(2) Sample test.
(3) Switching times measured with 500 Ω source impedance and <5ns rise time on a pulse generator