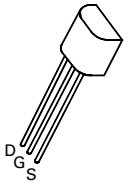
P-CHANNEL ENHANCEMENT MODE VERTICAL DMOS FET

BS250P

ISSUE 2 – SEPT 93

FEATURES

* 45 Volt V_{DS}
* $R_{DS(on)}$=14Ω



E-Line
TO92 Compatible

REFER TO ZVP2106A FOR GRAPHS

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-45	V
Continuous Drain Current at T_{amb}=25°C	I_D	-230	mA
Pulsed Drain Current	I_{DM}	-3	A
Gate-Source Voltage	V_{GS}	±20	V
Power Dissipation at T_{amb}=25°C	P_{tot}	700	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV_{DSS}	-45			V	I_D=-100μA, V_{GS}=0V
Gate-Source Threshold Voltage	$V_{GS(th)}$	-1		-3.5	V	I_D=-1mA, V_{DS}=V_{GS}
Gate Body Leakage	I_{GSS}			-20	nA	VGS=-15V, V_{DS}=0V
Zero Gate Voltage Drain Current	I_{DSS}			-500	nA	V_{GS}=0V, V_{DS}=-25V
Static Drain-Source on-State Resistance (1)	$R_{DS(on)}$			14	Ω	V_{GS}=-10V, I_D=-200mA
Forward Transconductance (1)(2)	g_{fs}		150		mS	V_{DS}=-10V, I_D=-200mA
Input Capacitance (2)	C_{iss}		60		pF	V_{GS}=0V, V_{DS}=-10V f=1MHz
Turn-On Time (2)(3)	$t_{(on)}$			20	ns	V_{DD}≈-25V, I_D=-500mA
Turn-Off Time (2)(3)	$t_{(off)}$			20	ns	

(1) Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2% (2) Sample test
(3) Switching times measured with a 50Ω source impedance and <5ns rise time on a pulse generator

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.