



ZVP0535A

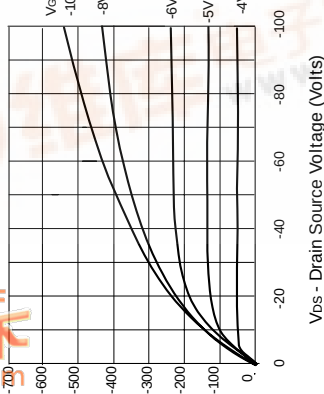
P-CHANNEL ENHANCEMENT
MODE VERTICAL DMOS FET

ISSUE 2 – MARCH 94

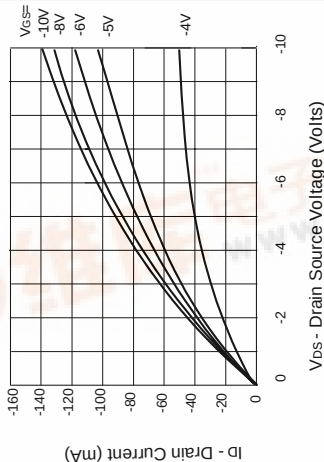
FEATURES

- * 350 Volt V_{DS}
- * $R_{DS(on)}=100\Omega$

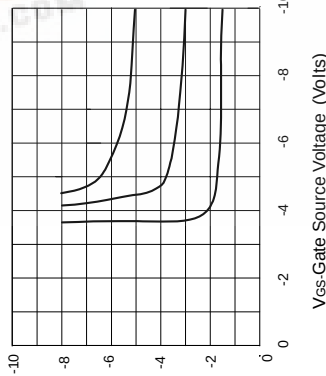
TYPICAL CHARACTERISTICS



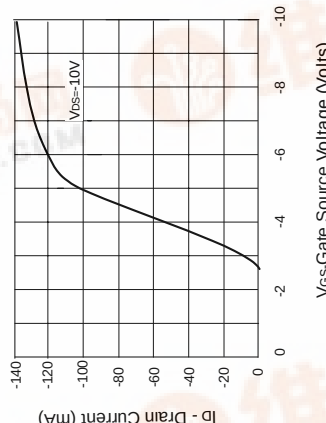
Output Characteristics



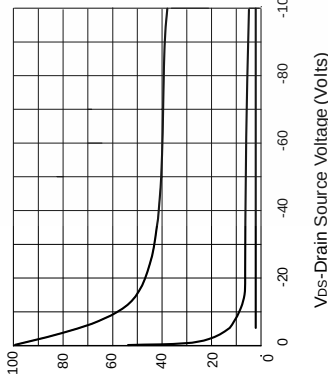
Saturation Characteristics



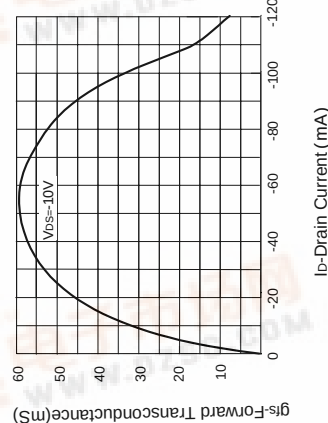
Voltage Saturation Characteristics



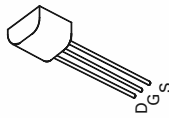
Transfer Characteristics



Capacitance v drain-source voltage



Transconductance v drain current



E-Line
TO92 Compatible

ZVP0535A

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-350	V
Continuous Drain Current at $T_{amb}=25^{\circ}\text{C}$	I_D	-50	mA
Pulsed Drain Current	I_{DM}	-480	mA
Gate Source Voltage	V_{GS}	± 20	V
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$	P_{tot}	700	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	$^{\circ}\text{C}$

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

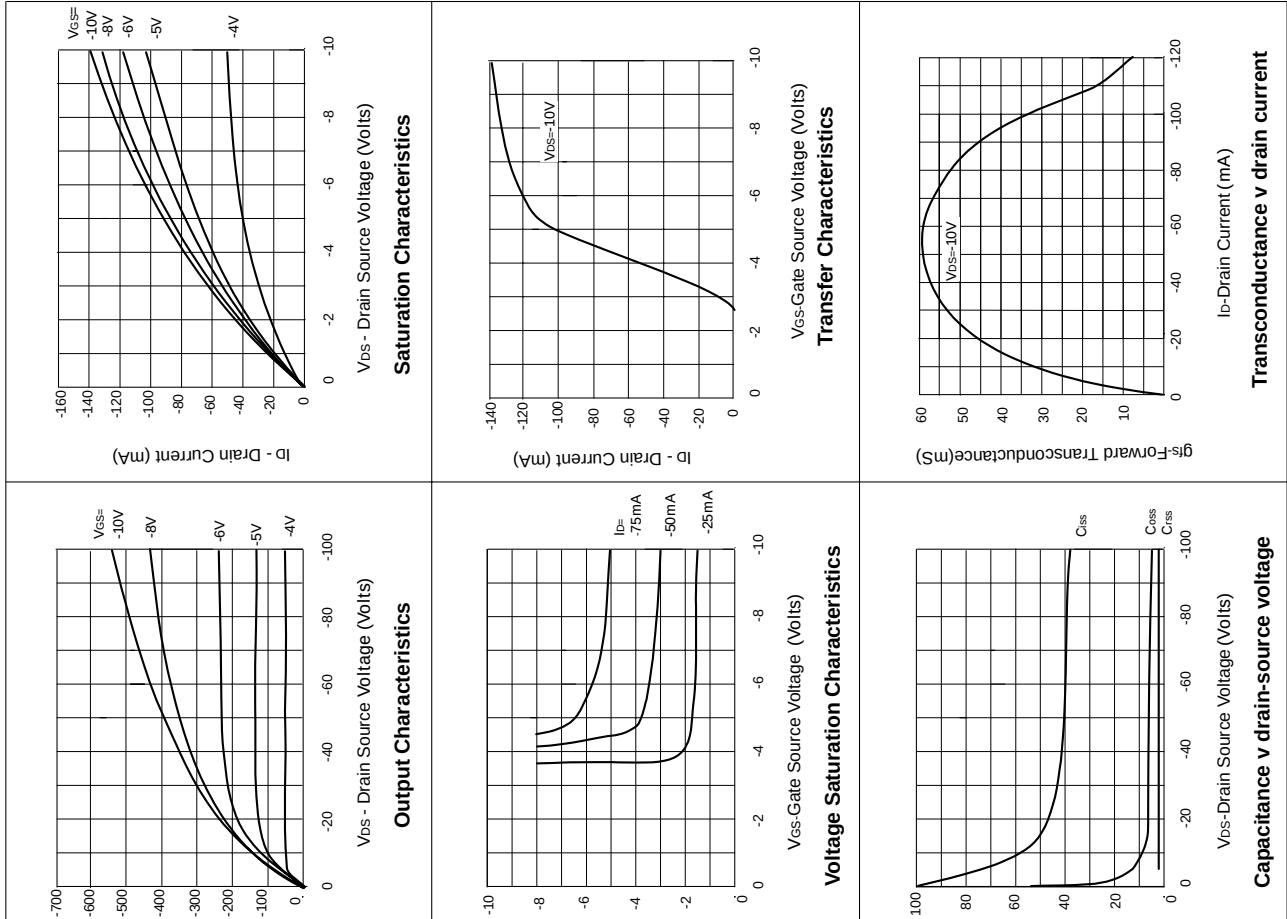
PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV_{DSS}	-350		V	$I_D = -1\text{mA}$, $V_{GS}=0\text{V}$
Gate-Source Threshold Voltage	$V_{GS(th)}$	-1.5	-4.5	V	$I_D = -1\text{mA}$, $V_{DS} = V_{GS}$
Gate-Body Leakage	I_{GSS}		100	nA	$V_{GS} = \pm 20\text{V}$, $V_{DS}=0\text{V}$
Zero Gate Voltage Drain Current	I_{DSS}		-20 -2	μA mA	$V_{DS} = -350\text{V}$, $V_{GS}=0$ $V_{DS} = -280\text{V}$, $V_{GS}=0\text{V}$, $T = 125^{\circ}\text{C}(2)$
On-State Drain Current(1)	$I_{D(on)}$	-120		mA	$V_{DS} = -25\text{V}$, $V_{GS} = -10\text{V}$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$		100	Ω	$V_{GS} = -10\text{V}$, $I_D = -50\text{mA}$
Forward Transconductance (1)(2)	g_{fs}	40		mS	$V_{DS} = -25\text{V}$, $I_D = -50\text{mA}$
Input Capacitance (2)	C_{iss}		120	pF	
Common Source Output Capacitance (2)	C_{oss}		20	pF	$V_{DS} = -25\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{MHz}$
Reverse Transfer Capacitance (2)	C_{rss}		5	pF	
Turn-On Delay Time (2)(3)	$t_{d(on)}$		10	ns	
Rise Time (2)(3)	t_r		15	ns	
Turn-Off Delay Time (2)(3)	$t_{d(off)}$		15	ns	
Fall Time (2)(3)	t_f		20	ns	

(1) Measured under pulsed conditions. Width=300 μs . Duty cycle $\leq 2\%$

查询ZVP0535A供应商

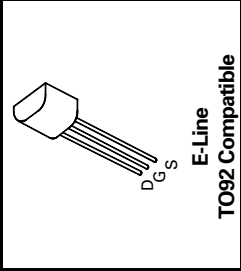
捷多邦, 专业PCB打样工厂, 24小时加急出货

TYPICAL CHARACTERISTICS



FEATURES

- * 350 Volt V_{DS}
- * $R_{DS(on)}=100\Omega$



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-350	V
Continuous Drain Current at $T_{amb}=25^{\circ}C$	I_D	-50	mA
Pulsed Drain Current	I_{DM}	-480	mA
Gate Source Voltage	V_{GS}	± 20	V
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{Tot}	700	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV_{DSS}	-350		V	$I_D=-1mA, V_{GS}=0V$
Gate-Source Threshold Voltage	$V_{GS(th)}$	-1.5	-4.5	V	$ID=-1mA, V_{DS}=V_{GS}$
Gate-Body Leakage	I_{GSS}		100	nA	$V_{GS}=\pm 20V, V_{DS}=0V$
Zero Gate Voltage Drain Current	I_{DSS}		-20 -2	μA mA	$V_{DS}=-350V, V_{GS}=0$ $V_{DS}=-280V, V_{GS}=0V, T=125^{\circ}C(2)$
On-State Drain Current(1)	$I_{D(on)}$	-120		mA	$V_{DS}=-25V, V_{GS}=-10V$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$		100	Ω	$V_{GS}=-10V, I_D=-50mA$
Forward Transconductance (1)(2)	g_{fs}	40		mS	$V_{DS}=-25V, I_D=-50mA$
Input Capacitance (2)	C_{iss}		120	pF	
Common Source Output Capacitance (2)	C_{oss}		20	pF	$V_{DS}=-25V, V_{GS}=0V, f=1MHz$
Reverse Transfer Capacitance (2)	C_{rss}		5	pF	
Turn-On Delay Time (2)(3)	$t_{d(on)}$		10	ns	
Rise Time (2)(3)	t_r		15	ns	$V_{DD}=-25V, I_D=-50mA$
Turn-Off Delay Time (2)(3)	$t_{d(off)}$		15	ns	
Fall Time (2)(3)	t_f		20	ns	

(1) Measured under pulsed conditions. Width=300 μs . Duty cycle $\leq 2\%$

3-409

ZVP0535A

TYPICAL CHARACTERISTICS

