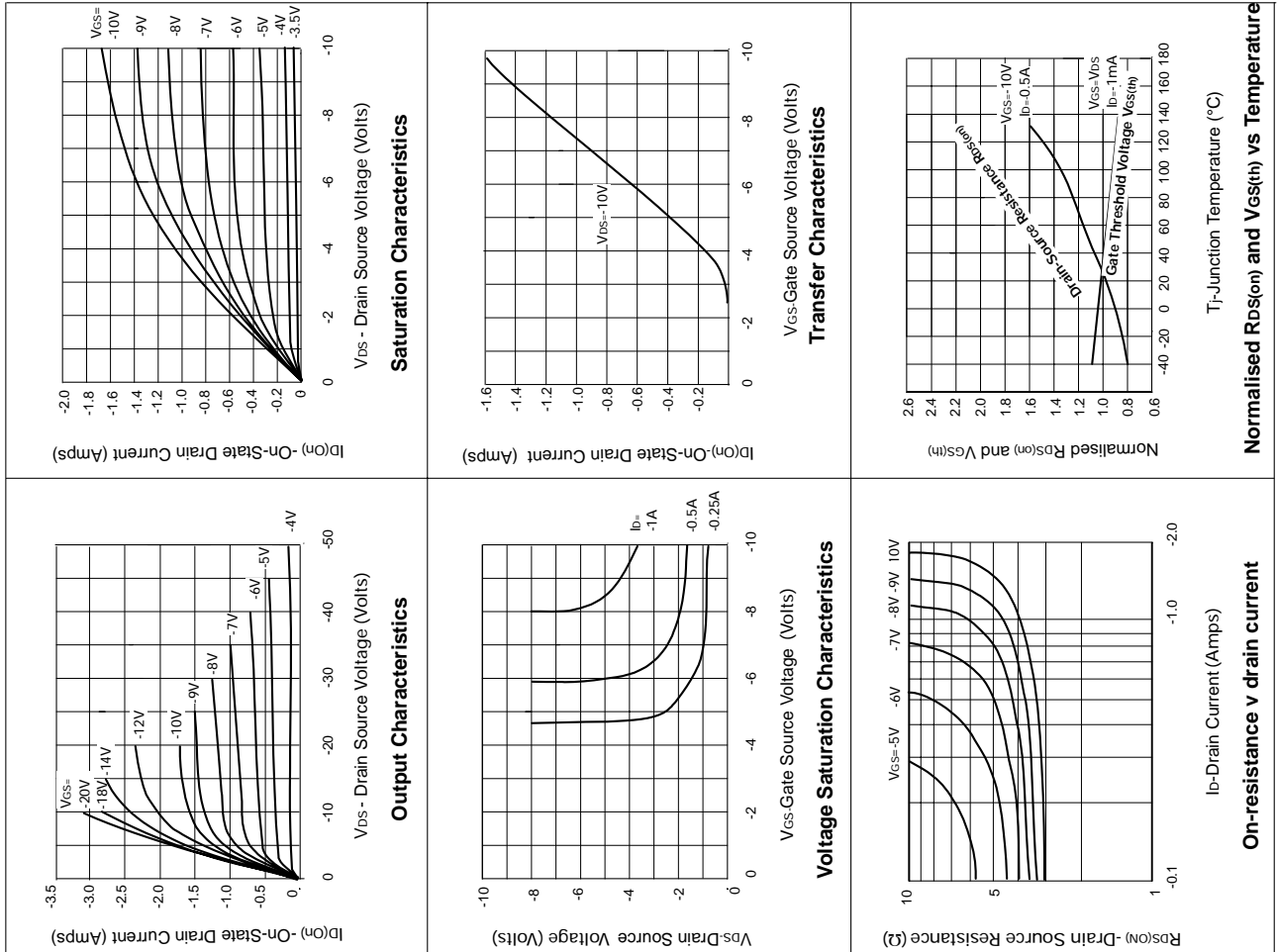
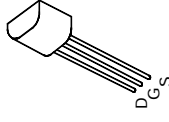


TYPICAL CHARACTERISTICS



FEATURES

- * 60 Volt V_{DS}
- * R_{DS(on)}=5Ω



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V _{DS}	-60	V
Continuous Drain Current at T _{amb} =25°C	I _D	-280	mA
Pulsed Drain Current	I _{DM}	-4	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

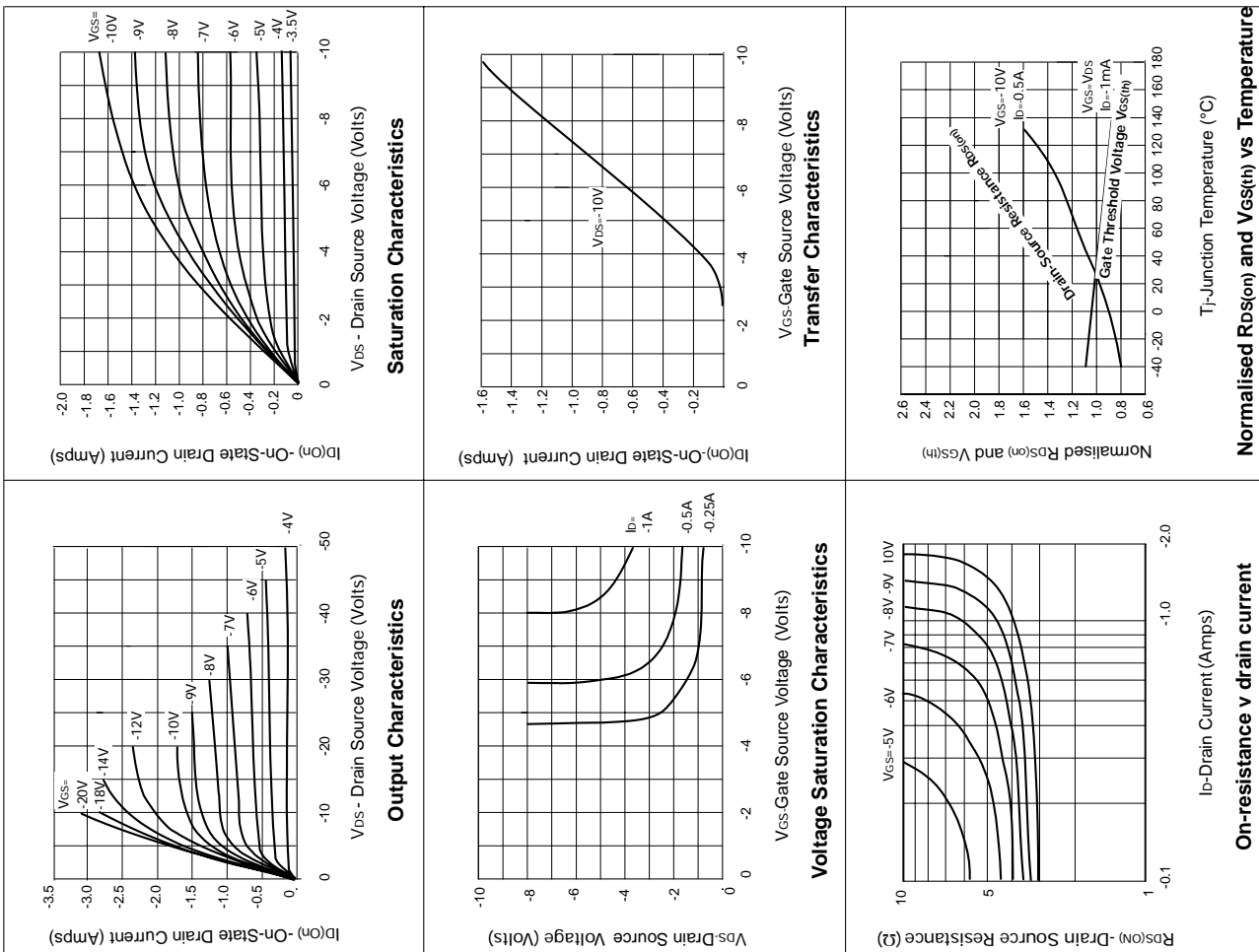
ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV _{DSS}	-60		V	I _D =-1mA, V _{GS} =0V
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} =±20V, V _{DS} =0V
Zero Gate Voltage Drain Current	I _{DSS}		-0.5 -100	μA	V _{DS} =-60 V, V _{GS} =0 V _{DS} =-48 V, V _{GS} =0V, T = 125°C (2)
On-State Drain Current(1)	I _{D(on)}	-1		A	V _{DS} =-18 V, V _{GS} =-10V
Static Drain-Source On-State Resistance (1)	R _{DS(on)}		5	Ω	V _{GS} =-10V, I _D =-500mA
Forward Transconductance (1)(2)	g _{fs}	150		mS	V _{DS} =-18V, I _D =-500mA
Input Capacitance (2)	C _{iss}		100	pF	
Common Source Output Capacitance (2)	C _{oss}		60	pF	V _{DS} =-18V, V _{GS} =0V, f=1MHz
Reverse Transfer Capacitance (2)	C _{rss}		20	pF	
Turn-On Delay Time (2)(3)	t _{d(on)}		7	ns	
Rise Time (2)(3)	t _r		15	ns	V _{DD} =-18V, I _D =-500mA
Turn-Off Delay Time (2)(3)	t _{d(off)}		12	ns	
Fall Time (2)(3)	t _f		15	ns	

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

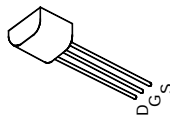
(2) Sample test.

TYPICAL CHARACTERISTICS



FEATURES

- * 60 Volt V_{DS}
- * $R_{DS(on)} = 5\Omega$



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-60	V
Continuous Drain Current at $T_{amb}=25^{\circ}C$	I_D	-280	mA
Pulsed Drain Current	I_{DM}	-4	A
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}	-60		V	$I_D = -1mA, V_{GS} = 0V$
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	$V_{GS} = \pm 20V, V_{DS} = 0V$
Zero Gate Voltage Drain Current	I_{DSS}		-0.5	μA	$V_{DS} = -60V, V_{GS} = 0$
On-State Drain Current(1)	$I_{D(on)}$	-1		A	$V_{DS} = -48V, V_{GS} = 0V, T = 125^{\circ}C(2)$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$		5	Ω	$V_{DS} = -18V, V_{GS} = -10V$
Forward Transconductance (1)(2)	g_{fs}	150		mS	$V_{DS} = -18V, I_D = -500mA$
Input Capacitance (2)	C_{iss}		100	pF	
Common Source Output Capacitance (2)	C_{oss}		60	pF	$V_{DS} = -18V, V_{GS} = 0V, f = 1MHz$
Reverse Transfer Capacitance (2)	C_{rss}		20	pF	
Turn-On Delay Time (2)(3)	$t_{d(on)}$		7	ns	
Rise Time (2)(3)	t_r		15	ns	$V_{DD} = -18V, I_D = -500mA$
Turn-Off Delay Time (2)(3)	$t_{d(off)}$		12	ns	
Fall Time (2)(3)	t_f		15	ns	

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

(2) Sample test.

ZVP2106A

TYPICAL CHARACTERISTICS

