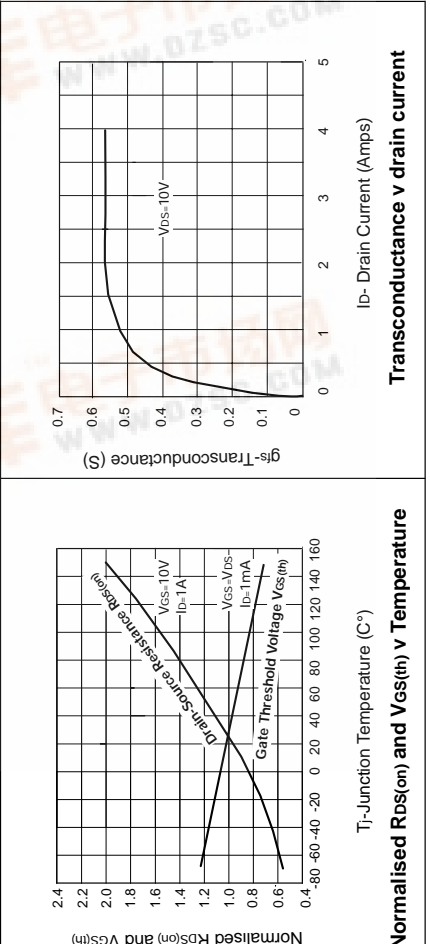
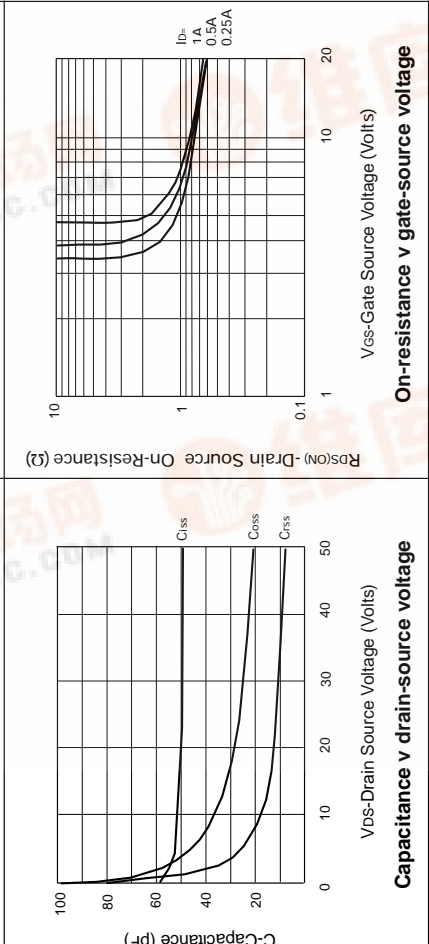
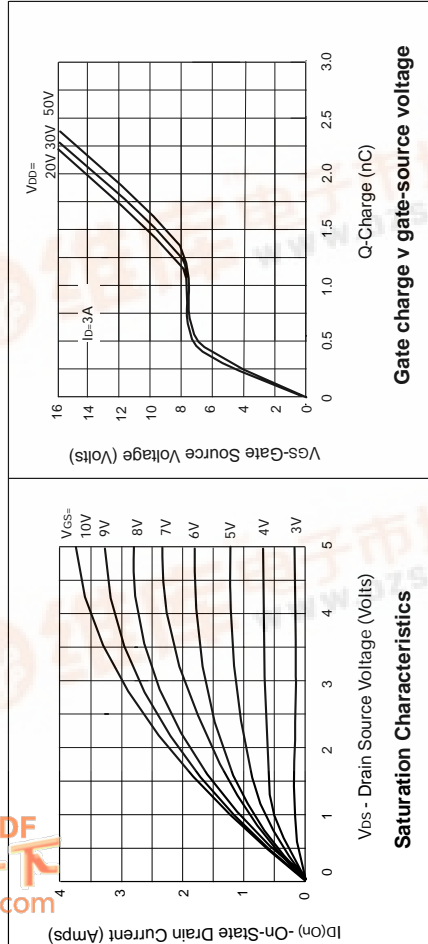


TYPICAL CHARACTERISTICS



ISSUE 3 - NOVEMBER 1995

FEATURES

- * 60 Volt V_{DS}
- * $R_{DS(on)}=2\Omega$

COMPLEMENTARY TYPE - ZVP2106G
PARTMARKING DETAIL - ZVN2106

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	710	mA
Pulsed Drain Current	I_{DM}	8	A
Gate Source Voltage	V_{GS}	± 20	V
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{Tot}	2.0	W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^{\circ}C$

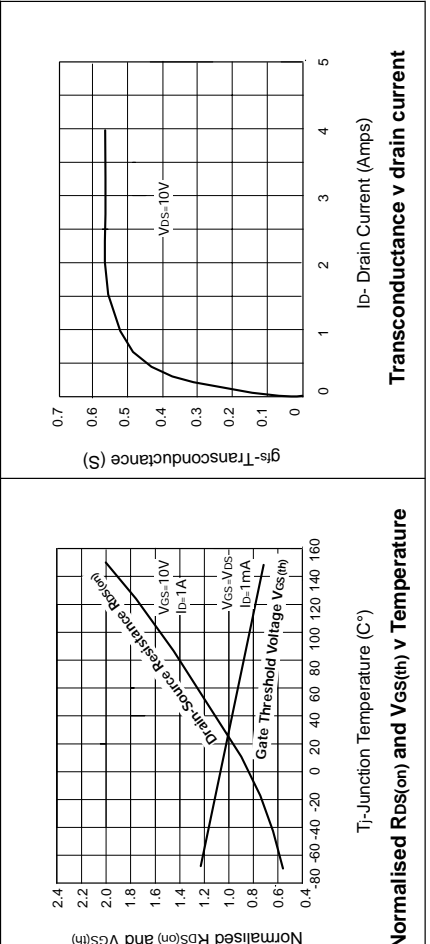
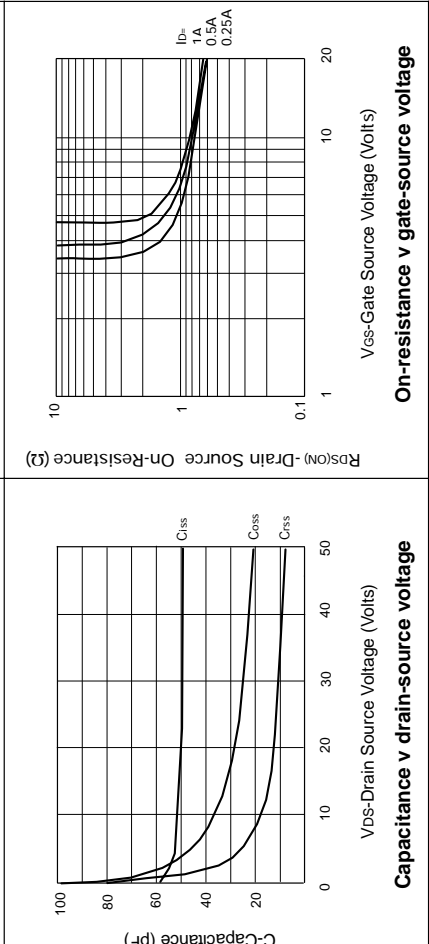
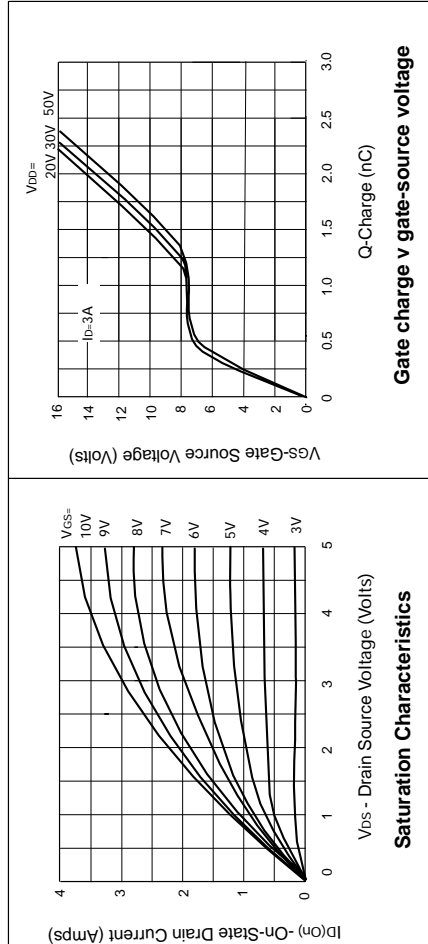
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV_{DSS}	60	V	$I_D=1mA, V_{GS}=0V$
Gate-Source Threshold Voltage	$V_{GS(th)}$	0.8	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}	500 100	nA μA	$V_{DS}=60V, V_{GS}=0V$ $V_{DS}=48V, V_{GS}=0V, T=125^{\circ}C(2)$
On-State Drain Current (1)	$I_{D(on)}$	2	A	$V_{DS}=18V, V_{GS}=10V$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$	2	Ω	$V_{GS}=10V, I_D=1A$
Forward Transconductance (1)(2)	g_{fs}	300	mS	$V_{DS}=18V, I_D=1A$
Input Capacitance (2)	C_{iss}	75	pF	
Common Source Output Capacitance (2)	C_{oss}	45	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	8	ns	$V_{DD}=18V, I_D=1A$
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.
(3) Switching times measured with 50 Ω source impedance and <5ns rise time on a pulse generator
Spice parameter data is available upon request for this device

ISSUE 3 - NOVEMBER 1995

TYPICAL CHARACTERISTICS



FEATURES

- * 60 Volt V_{DS}
- * R_{DS(on)}=2Ω

COMPLEMENTARY TYPE - ZVP2106G
PARTMARKING DETAIL - ZVN2106

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V _{DS}	60	V
Continuous Drain Current at T _{amb} =25°C	I _D	710	mA
Pulsed Drain Current	I _{DM}	8	A
Gate Source Voltage	V _{GS}	±20	V
Power Dissipation at T _{amb} =25°C	P _{Tot}	2.0	W
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)}	0.8	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}	500 100	nA 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)}	2	A	V _{DS} =18V, V _{GS} =10V
Static Drain-Source On-State Resistance (1)	R _{DS(on)}	2	Ω	V _{GS} =10V, I _D =1A
Forward Transconductance (1)(2)	g _{fs}	300	mS	V _{DS} =18V, I _D =1A
Input Capacitance (2)	C _{iss}	75	pF	
Common Source Output Capacitance (2)	C _{oss}	45	pF	V _{DS} =18 V, 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	8	ns	V _{DD} =18V, I _D =1A
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.
(3) Switching times measured with 50Ω source impedance and <5ns rise time on a pulse generator
Spice parameter data is available upon request for this device