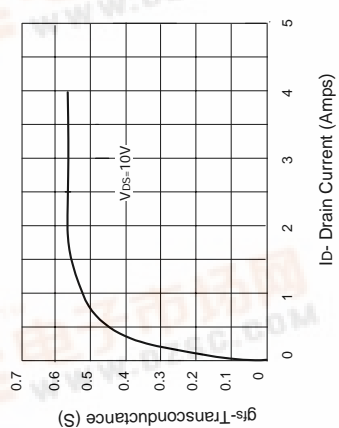
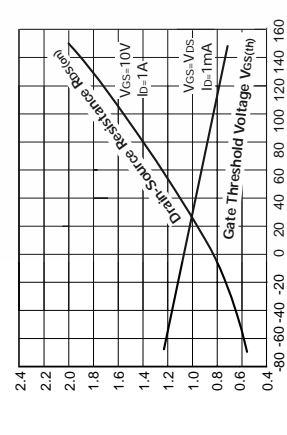
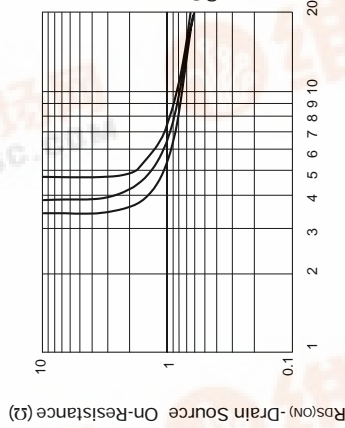
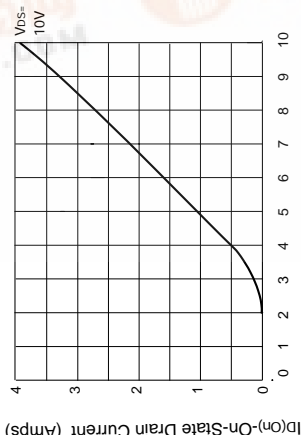
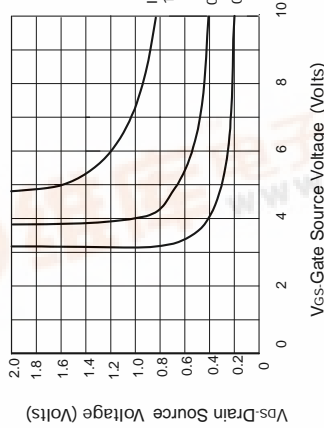
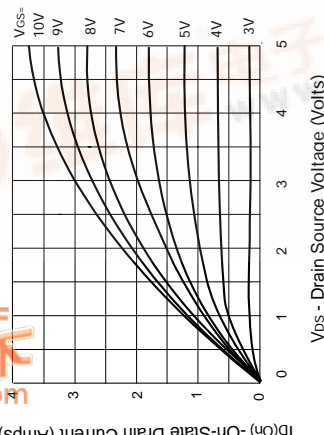


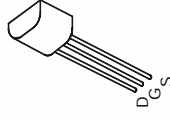
TYPICAL CHARACTERISTICS



ISSUE 2 - MARCH 94

FEATURES

- \* 60 Volt V<sub>DS</sub>
- \* R<sub>DS(on)</sub>=2Ω



E-Line  
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V <sub>DS</sub>	60	V
Continuous Drain Current at T <sub>amb</sub> =25°C	I <sub>D</sub>	450	mA
Pulsed Drain Current	I <sub>DM</sub>	8	A
Gate Source Voltage	V <sub>GS</sub>	± 20	V
Power Dissipation at T <sub>amb</sub> =25°C	P <sub>Tot</sub>	700	mW
Operating and Storage Temperature	T <sub>j</sub> ; T <sub>stg</sub>	-55 to +150	°C

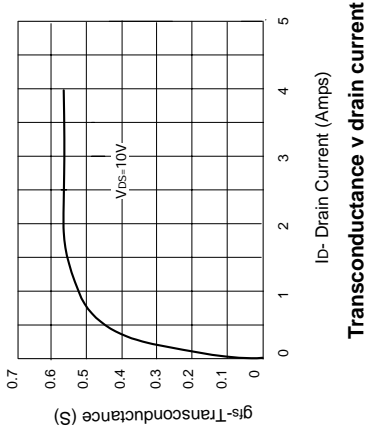
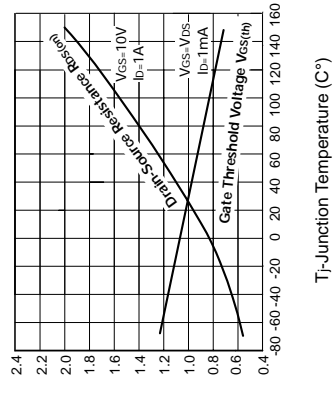
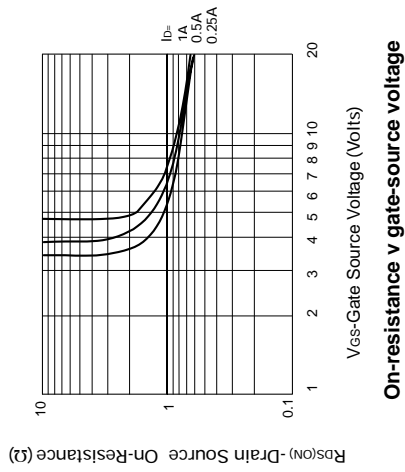
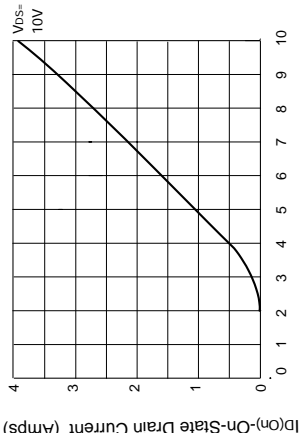
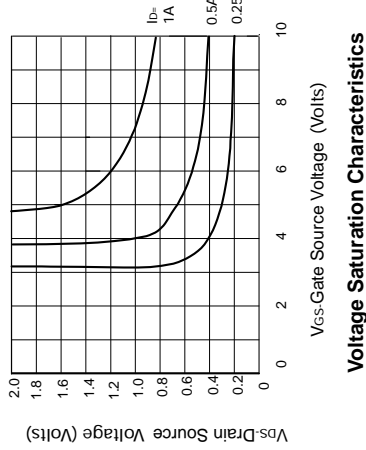
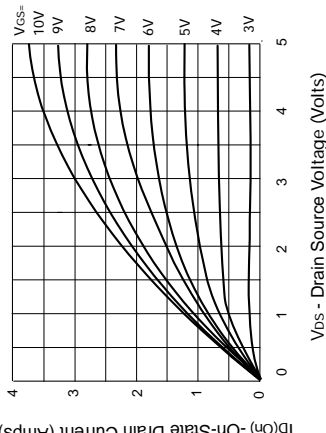
ELECTRICAL CHARACTERISTICS (at T<sub>amb</sub> = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV <sub>DSS</sub>	60		V	I <sub>D</sub> =1mA, V <sub>GS</sub> =0V
Gate-Source Threshold Voltage	V <sub>GS(th)</sub>	0.8	2.4	V	I <sub>D</sub> =1mA, V <sub>DS</sub> =V <sub>GS</sub>
Gate-Body Leakage	I <sub>GSS</sub>		20	nA	V <sub>GS</sub> =± 20V, V <sub>DS</sub> =0V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>		500 100	nA μA	V <sub>DS</sub> =60 V, V <sub>GS</sub> =0 V <sub>DS</sub> =48 V, V <sub>GS</sub> =0V, T=125°C(2)
On-State Drain Current(1)	I <sub>D(on)</sub>	2		A	V <sub>DS</sub> =18V, V <sub>GS</sub> =10V
Static Drain-Source On-State Resistance (1)	R <sub>DS(on)</sub>		2	Ω	V <sub>GS</sub> =10V, I <sub>D</sub> =1A
Forward Transconductance (1)(2)	g <sub>fs</sub>	300		mS	V <sub>DS</sub> =18V, I <sub>D</sub> =1A
Input Capacitance (2)	C <sub>iSS</sub>		75	pF	
Common Source Output Capacitance (2)	C <sub>oss</sub>		45	pF	V <sub>DS</sub> =18 V, V <sub>GS</sub> =0V, f=1MHz
Reverse Transfer Capacitance (2)	C <sub>rss</sub>		20	pF	

**N-CHANNEL ENHANCEMENT  
MODE VERTICAL DMOS FET**

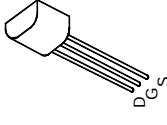
ISSUE 2 – MARCH 94

**TYPICAL CHARACTERISTICS**



**FEATURES**

- \* 60 Volt VDS
- \* RDS(on)=2Ω



**ABSOLUTE MAXIMUM RATINGS.**

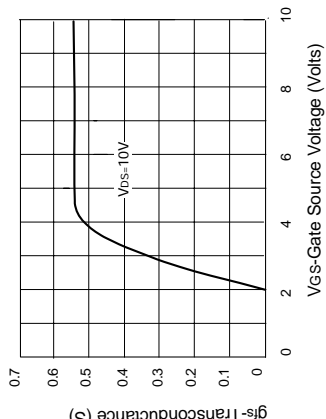
PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	VDS	60	V
Continuous Drain Current at Tamb=25°C	ID	450	mA
Pulsed Drain Current	IDM	8	A
Gate Source Voltage	VGS	± 20	V
Power Dissipation at Tamb=25°C	Ptot	700	mW
Operating and Storage Temperature Range	Tj, Tstg	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS (at Tamb = 25°C unless otherwise stated).**

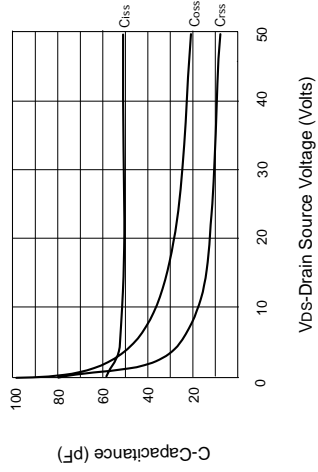
PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BVDSS	60		V	ID=1mA, VGS=0V
Gate-Source Threshold Voltage	VGS(th)	0.8	2.4	V	ID=1mA, VDS=VGS
Gate-Body Leakage	IGSS		20	nA	VGS=± 20V, VDS=0V
Zero Gate Voltage Drain Current	IDSS		500 100	nA µA	VDS=60 V, VGS=0 VDS=48 V, VGS=0V, T=125°C(2)
On-State Drain Current (1)	ID(on)	2		A	VDS=18V, VGS=10V
Static Drain-Source On-State Resistance (1)	RDS(on)		2	Ω	VGS=10V, ID=1A
Forward Transconductance (1)(2)	gmfs	300		mS	VDS=18V, ID=1A
Input Capacitance (2)	Ciss		75	pF	
Common Source Output Capacitance (2)	Coss		45	pF	VDS=18 V, VGS=0V, f=1MHz
Reverse Transfer Capacitance (2)	Crss		20	pF	

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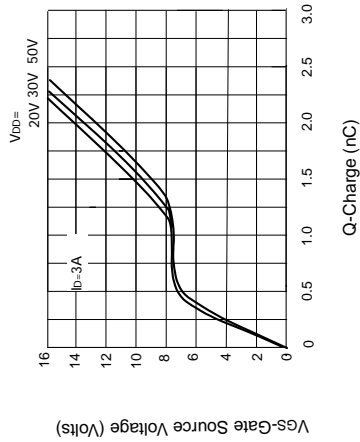
## TYPICAL CHARACTERISTICS



**Transconductance v gate-source voltage**



**Capacitance v drain-source voltage**



**Gate charge v gate-source voltage**