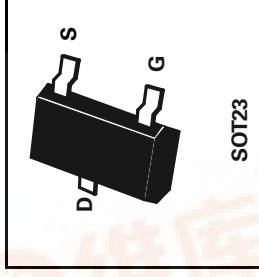


SOT23 P-CHANNEL ENHANCEMENT MODE VERTICAL DMOS FET

ISSUE 3 - JANUARY 1996

BS250F



PARTMARKING DETAIL – MIX

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-45	V
Continuous Drain Current at $T_{amb}=25^{\circ}\text{C}$	I_D	-90	mA
Pulsed Drain Current	I_{DM}	-1.6	A
Gate Source Voltage	V_{GS}	± 20	V
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$	P_{tot}	330	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.	TYP.	MAX.	UNIT	CONDITIONS
Drain-Source Breakdown Voltage	BV_{DSS}	-45	-70		V	$I_D = -100\mu\text{A}, V_{GS} = 0\text{V}$
Gate-Source Threshold Voltage	$V_{GS(th)}$	-1		-3.5	V	$I_D = -1\text{mA}, V_{DS} = V_{GS}$
Gate-Body Leakage	I_{GSS}			-20	nA	$V_{GS} = -15\text{V}, V_{DS} = 0\text{V}$
Zero Gate Voltage Drain Current	I_{DSS}			-0.5	μA	$V_{DS} = -25\text{V}, V_{GS} = 0\text{V}$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$		9	14	Ω	$V_{GS} = -10\text{V}, I_D = -200\text{mA}$
Forward Transconductance (1)(2)	g_{fs}		90		mS	$V_{DS} = -10\text{V}, I_D = -200\text{mA}$
Input Capacitance (2)	C_{iss}		25		pF	$V_{DS} = -10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$
Turn-On Delay Time (2)(3)	$t_{d(on)}$			10	ns	$V_{DD} = -25\text{V}, I_D = -200\text{mA}$
Rise Time (2)(3)	t_r			10	ns	
Turn-Off Delay Time (2)(3)	$t_{d(off)}$			10	ns	
Fall Time (2)(3)	t_f			10	ns	

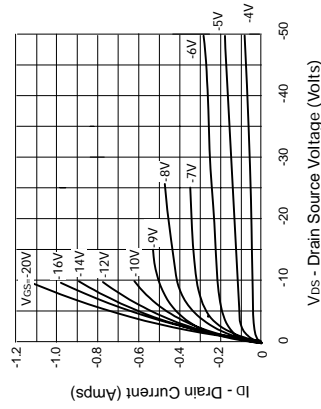
(1) Measured under pulsed conditions. Width=300 μs . Duty cycle $\leq 2\%$ (2) Sample test.
 (3) Switching times measured with 50 Ω source impedance and <5ns rise time on a pulse generator
 Spice parameter data is available upon request for this device

查询BS250F供应商

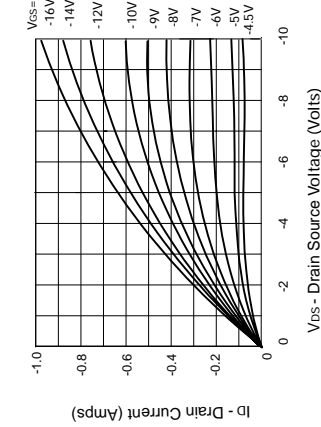
捷多邦, 专业PCB打样工厂, 24小时加急出货



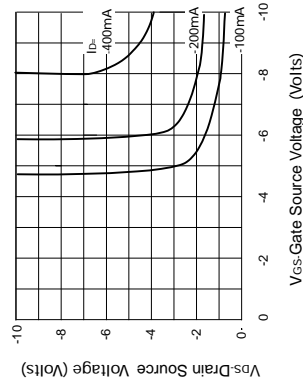
TYPICAL CHARACTERISTICS



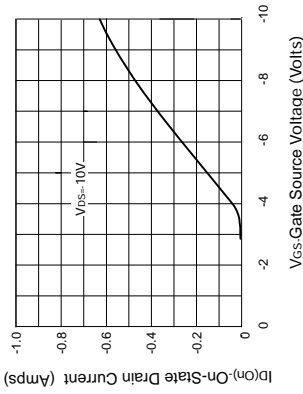
Output Characteristics



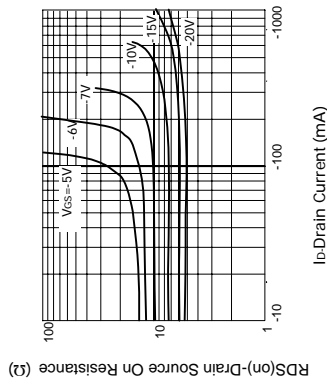
Saturation Characteristics



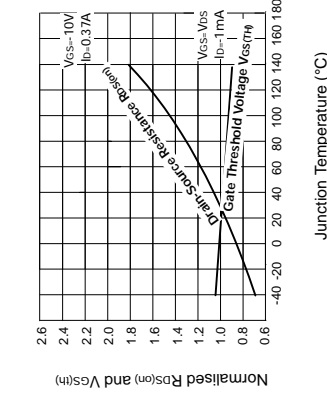
Voltage Saturation Characteristics



Transfer Characteristics

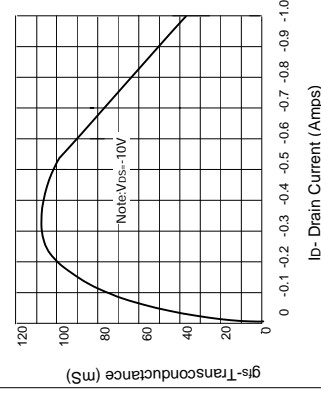


On-resistance vs Drain Current

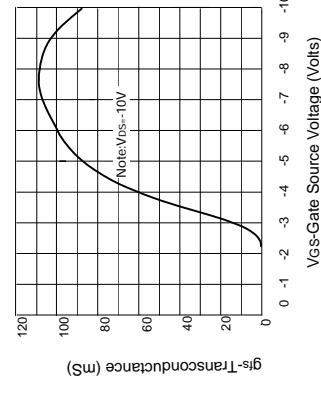


Normalized RDS(on) and VGS(th) vs Temperature

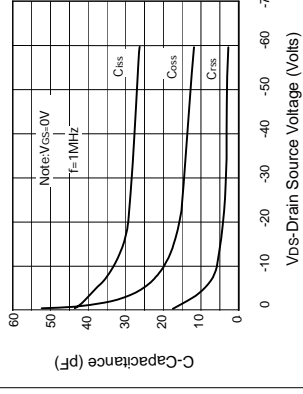
TYPICAL CHARACTERISTICS



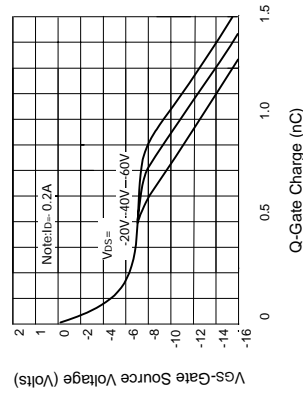
Transconductance vs drain current



Transconductance vs gate-source voltage

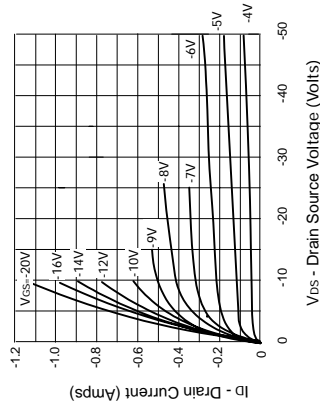


Capacitance vs drain-source voltage

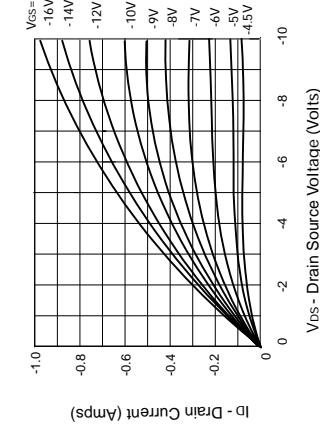


Gate charge vs gate-source voltage

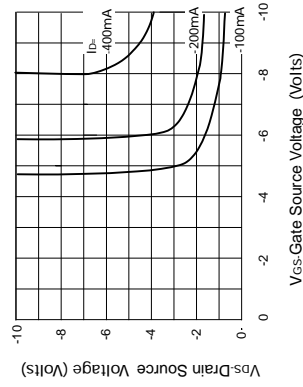
TYPICAL CHARACTERISTICS



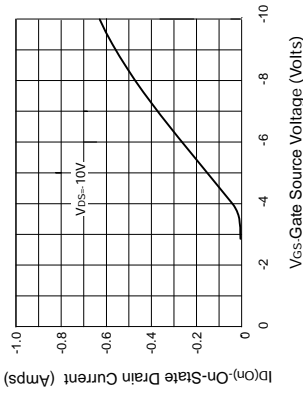
Output Characteristics



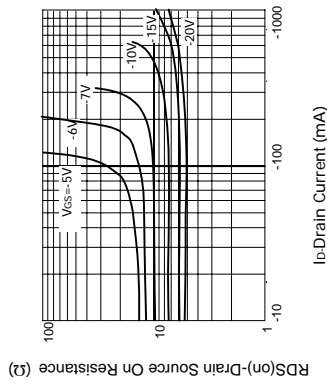
Saturation Characteristics



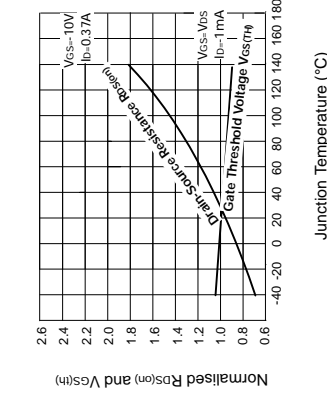
Voltage Saturation Characteristics



Transfer Characteristics

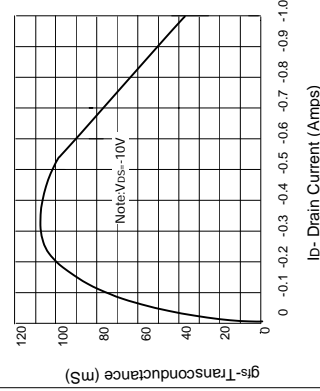


On-resistance vs Drain Current

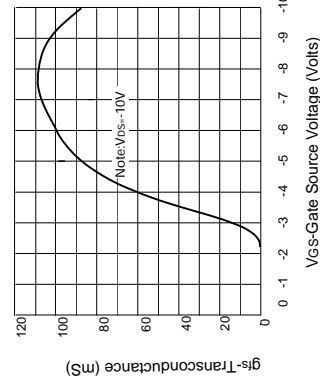


Normalised RDS(on) and VGS(th) vs Temperature

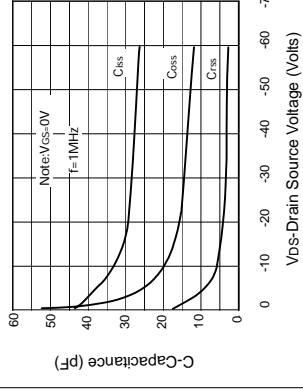
TYPICAL CHARACTERISTICS



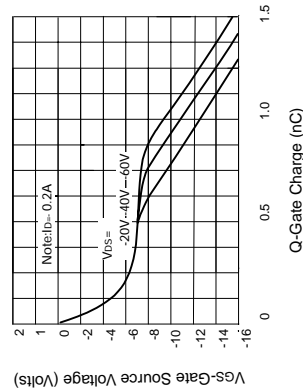
Transconductance v drain current



Transconductance v gate-source voltage



Capacitance v drain-source voltage



Gate charge v gate-source voltage