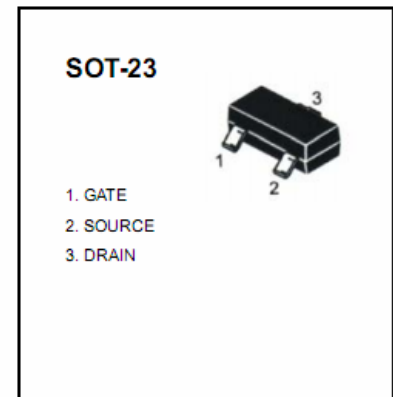
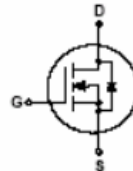


SOT-23 Plastic-Encapsulate Transistors

MOSFET(N-Channel)

FEATURES

- High density cell design for low $R_{DS(ON)}$
- Voltage controlled small signal switch
- Rugged and reliable
- High saturation current capability



MARKING:7002

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Symbol (符号)	Parameter (参数名称)	Value (额定值)	Units (单位)
V _{DS}	Drain-Source voltage	60	V
I _D	Drain current	115	mA
P _D	Power Dissipation	225	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} =0V, I _D =250uA	60			V
Gate-Threshold Voltage	V _{th(GS)}	V _{DS} = V _{GS} , I _D =250 uA	1	1.7	2.5	V
Gate-body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			1	uA
On-state Drain Current	I _{D(ON)}	V _{DS} =7V, V _{GS} =10V	500			mA
Drain-Source On-Resistance	r _{DS(ON)}	V _{GS} =10V, I _D =100mA		1	2	Ω
		V _{GS} =4.5V, I _D =50mA		1.1	3	Ω
Forward Trans conductance	g _{fs}	V _{DS} =10V, I _D =200mA	80		500	ms
Drain-source on-voltage	V _{DS(ON)}	V _{GS} =10V, I _D =500mA	0.5		3.75	V
		V _{GS} =5V, I _D =50mA	0.05		0.375	V
Diode Forward Voltage	V _{SD}	I _S =115mA, V _{GS} =0V	0.55		1.2	V
Input Capacitance	C _{iss}	V _{DS} =25V, V _{GS} =0V, f=1MHz			50	pF
Output Capacitance	C _{oss}				25	
Reverse Transfer Capacitance	C _{rss}				5	

SWITCHING TIME

Turn-on Time	t _{d(on)}	V _{DD} =25V, R _L =50 Ω I _D =500mA, V _{GEN} =10V,			20	ns
Turn-off Time	t _{d(off)}	R _G =25 Ω			40	ns

Typical Characteristics

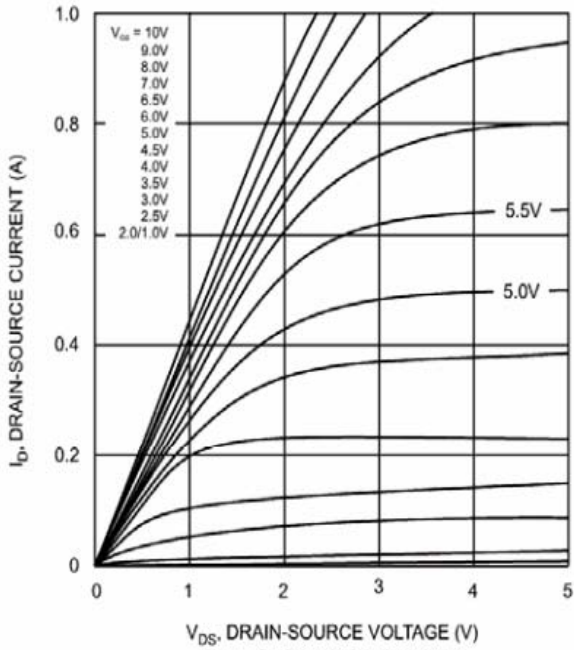


Fig. 1 On-Region Characteristics

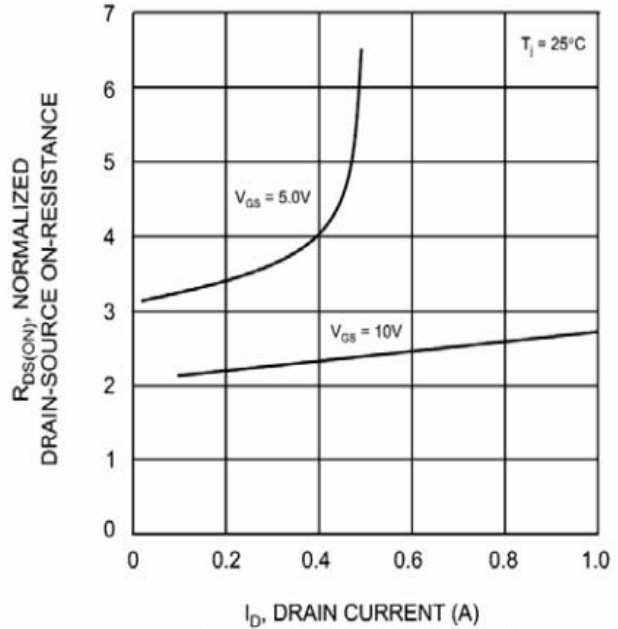


Fig. 2 On-Resistance vs Drain Current

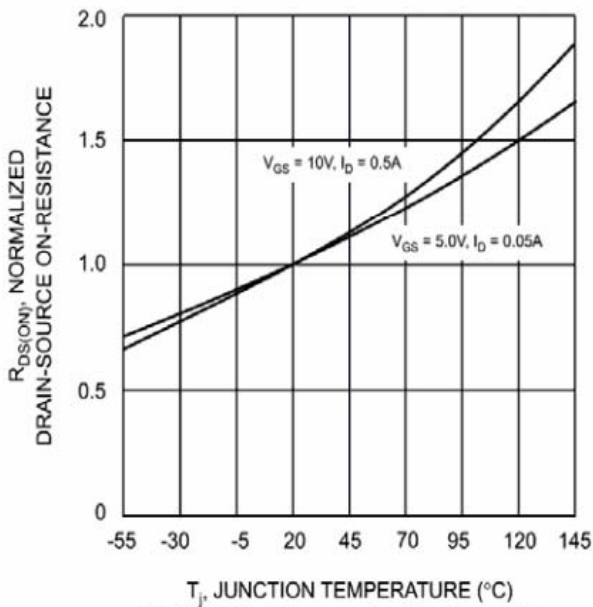


Fig. 3 On-Resistance vs Junction Temperature

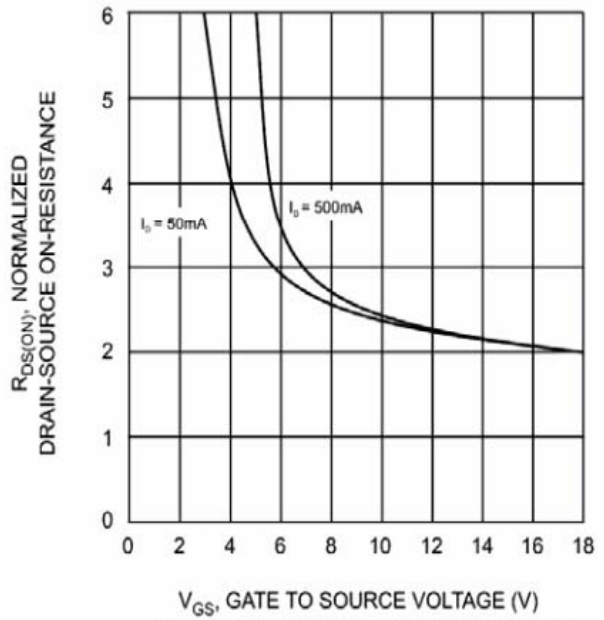


Fig. 4 On-Resistance vs. Gate-Source Voltage