HFZT

2SK3018

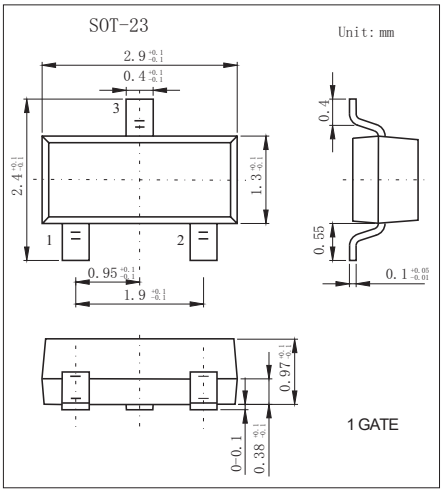
SOT-23 Plastic-Encapsulate MOSFETS

FEATURE

- ●Low on-resistance
- ●Fast switching speed□
- ●Low voltage drive makes this device ideal for□
- ●Portable equipment□
- ●Easily designed drive circuits□
- ●Easy to parallel
- ●N-channel MOSFET

MECHANICAL DATA

- ●Case style:SOT-23molded plastic
- ●Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	I_D	0.1	A
Power Dissipation	P_D	0.35	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55~+150	℃
Thermal Resistance , Junction-to-Ambient	$R_{\theta JA}$	357	℃ /W

Mosfet Electrical Characteristics TA=25°C unless otherwise specified)

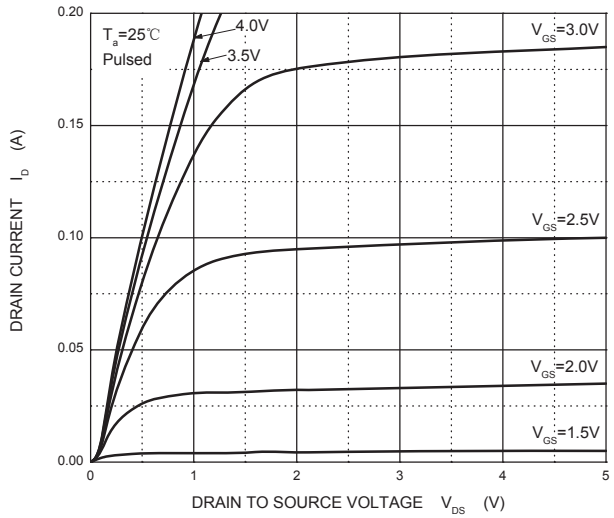
Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Off Characteristics						
Drain-Source Breakdown Voltage	V_{DS}	V_{GS} = 0V, I_D = 10μA	30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} =30V,V_{GS} = 0V			0.2	μA
Gate -Source leakage current	I_{DSS}	V_{GS} =±20V, V_{DS} = 0V				μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} = 3V, I_D =100μA	0.8		1.5	V
Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS} = 4V, I_D =10mA			8	Ω
		V_{GS} =2.5V,I_D =1mA			13	Ω
Forward Transconductance	g_{FS}	V_{DS} =3V, I_D = 10mA	20			mS
Dynamic Characteristics* 1nput						
Capacitance	C_{iss}	V_{DS} =5V , V_{GS} =0V , f =1MHz		13		pF
Output Capacitance Reverse	C_{oss}			9		pF
Transfer Capacitance **Switching**	C_{rss}			4		pF
Characteristics* Turn-On Delay						
Time	$t_{d(on)}$	V_{GS} =5V, V_{DD} =5V, □ I_D =10mA, Rg=10Ω, R_L=500Ω		15		ns
Rise Time	t_r			35		ns
Turn-Off Delay Time	$t_{d(off)}$			80		ns
Fall Time	t_f			80		ns

* These parameters have no way to verify.

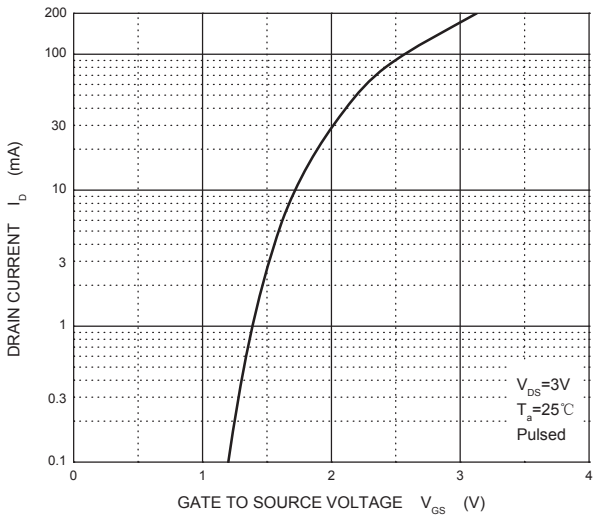
RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

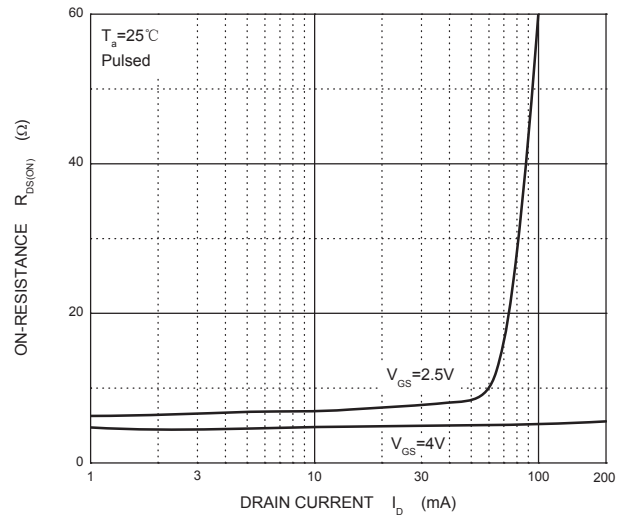
Output Characteristics



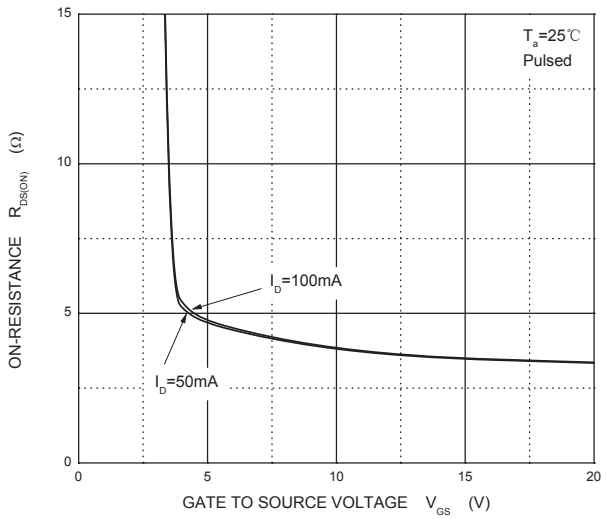
Transfer Characteristics



$R_{DS(ON)}$ — I_D



$R_{DS(ON)}$ — V_{GS}



I_S — V_{SD}