

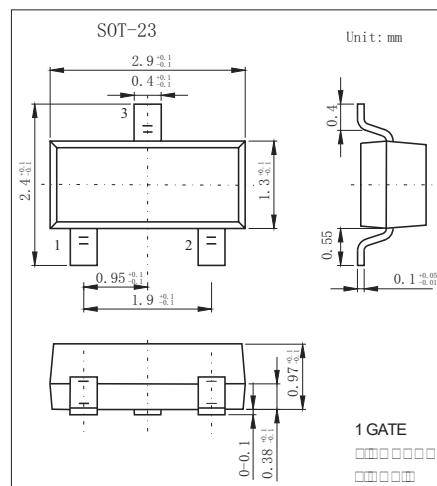
SOT-23 Plastic-Encapsulate MOSFETS

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	°C
Storage Temperature	T_{stg}	-55~+150	°C
Thermal Resistance , Junction-to-Ambient	$R_{\theta JA}$	357	°C /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}	$V_{GS} = 0V, I_D = 10\mu A$	30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 30V, V_{GS} = 0V$			0.2	μA
Gate -Source leakage current	I_{DSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$				μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = 3V, I_D = 100\mu A$	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* 1input						
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	$t_{d(on)}$	$V_{GS} = 5V, V_{DD} = 5V, \square$ $I_D = 10mA, R_g = 10\Omega, R_L = 500\Omega$		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

