

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

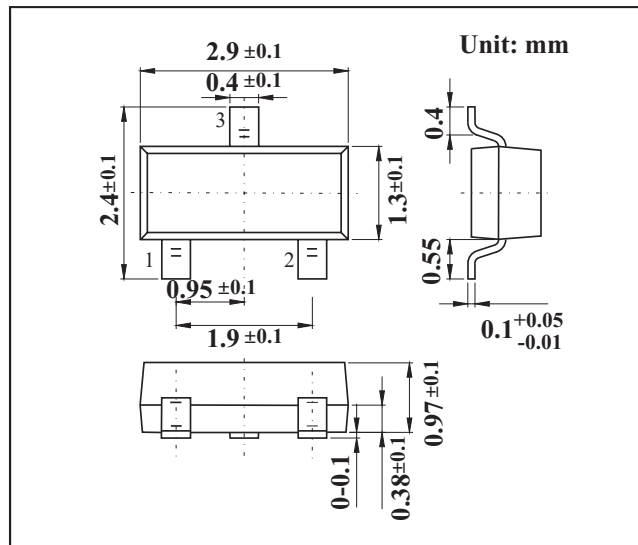
@ 25°C Ambient Temperature (unless otherwise noted)

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 = 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, R _g =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

