

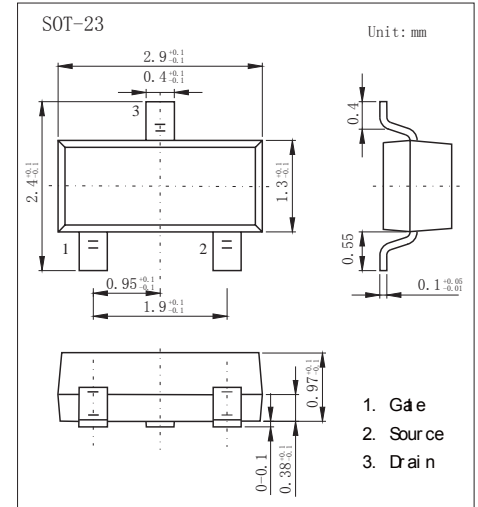
SOT-23 Plastic-Encapsulate MOSFETS

Features

- VDS (V) = 50V
- ID = 200 mA (VGS = 10V)
- RDS(ON) < 3.5Ω (VGS = 10V)
- Fast Switching Speed
- Low On-Resistance
- 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	Rating	Unit
Drain-Source Voltage	V _{DS}	50	V
Drain-Gate Voltage R _{GS} ≤ 20KΩ	V _{DG}	50	
Gate-Source Voltage	V _{GS}	±20	
Continuous Drain Current	I _D	200	mA
Power Dissipation	P _D	300	mW
Thermal Resistance.Junction- to-Ambient	R _{thJA}	417	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

MOSFET ELECTRICAL CHARACTERISTICS Ta=25 °C unless otherwise specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =250 μ A, V _{GS} =0V	50			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =50V, V _{GS} =0V			0.5	μ A
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250 μ A	0.5		1.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =220mA			3.5	Ω
Forward Transconductance	g _{FS}	V _{DS} =25V, I _D =0.2A,f=1KHz	100			mS
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =10V, f=1MHz			50	pF
Output Capacitance	C _{oss}				25	
Reverse Transfer Capacitance	C _{rss}				8	
Turn-On DelayTime	t _{d(on)}	V _{DS} =30V, I _D =0.2A,R _G =50 Ω			20	ns
Turn-Off DelayTime	t _{d(off)}				20	

Marking	K38
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RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

