MOS Field Effect Transistors

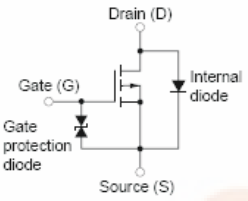
2SJ356

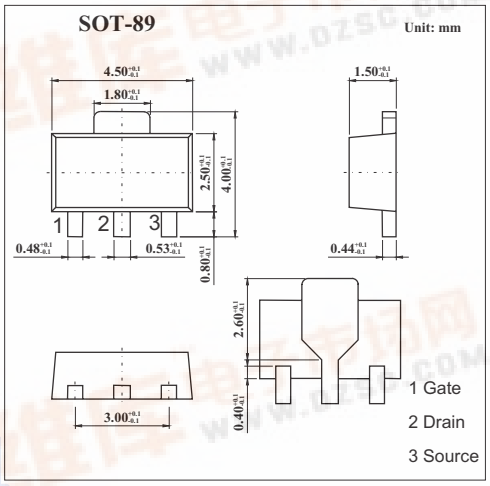
Features

- Low on-state resistance

  $R_{DS(on)}$=0.95Ω (V_{GS}=-4V,I_D=-1.0A)

  $R_{DS(on)}$=0.50Ω (V_{GS}=-10V,I_D=-1.0A)





Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	-60	V
Gate to source voltage	V_{GSS}	-20,+10	V
Drain current (DC)	I_D	±2.0	A
Drain current(pulse) *	I_D	±4	A
Power dissipation	P_D	2.0	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW ≤ 10 μs; d ≤ 1%.

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=-60V,V_{GS}=0			-10	μA
Gate leakage current	I_{GSS}	V_{GS}=±16/+10V,V_{DS}=0			±10	μA
Gate cut-off voltage	$V_{GS(off)}$	V_{DS}=-10V,I_D=-1mA	-1.0	-1.4	-2.0	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=-10V,I_D=-1.0A	1.0			S
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=-4V,I_D=-1.0A		0.65	0.95	Ω
		V_{GS}=-10V,I_D=-1.0A		0.41	0.50	Ω
Input capacitance	C_{iss}	V_{DS}=-10V,V_{GS}=0,f=1MHZ		270		pF
Output capacitance	C_{oss}			145		pF
Reverse transfer capacitance	C_{rss}			55		pF
Turn-on delay time	$t_{d(on)}$	$V_{GS(on)}$=-10V,V_{DD}=-25V,I_D=--1A R_L=255Ω,R_G=10Ω		4.3		ns
Rise time	t_r			21		ns
Turn-off delay time	$t_{d(off)}$			115		ns
Fall time	t_f			75		ns
Total Gate Charge	Q_g	V_{GS}=-10V,I_D=-2.0A,V_{DD}=-48V,I_G=-2mA		11.6		nC
Gate to Source Charge	Q_{GS}			1.0		nC
Gate Drain Charge	Q_{GD}			3.8		nC
Reverse Recovery time	t_{rr}	I_F=2.0A,V_{GS}=0,di/dt=50A/μs		82		ns
Reverse Recovery Charge	Q_{rr}			94		nC