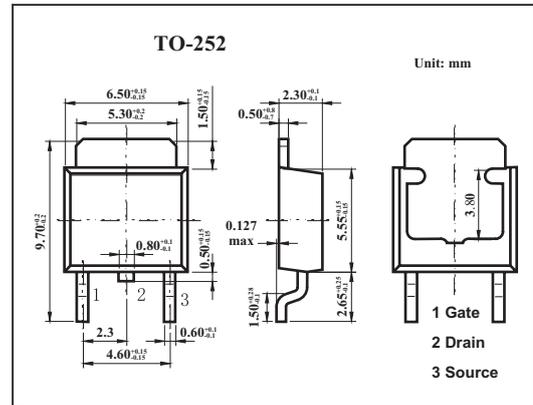
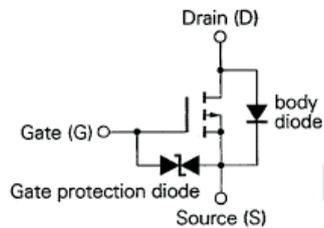


MOS Field Effect Power Transistors

2SJ325

■ Features

- Low on-state resistance
 $R_{DS(on)}=83\text{m}\Omega$ ($V_{GS}=-10\text{V}, I_D=-2\text{A}$)
 $R_{DS(on)}=0.15\Omega$ ($V_{GS}=-4\text{V}, I_D=-1.6\text{A}$)
- Built-in G-S Gate Protection Diode



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Drain to source voltage	V_{DS}	-30	V	
Gate to source voltage (DC)	V_{GS}	-20,+10	V	
Gate to source voltage (AC)	V_{GS}	± 20	V	
Drain current (DC)	I_D	± 4.0	A	
Drain current(pulse) *	I_D	± 16	A	
Power dissipation	P_D	$T_C=25^\circ\text{C}$	20	W
		$T_A=25^\circ\text{C}$	1.0	W
Channel temperature	T_{ch}	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

* $PW \leq 10 \mu\text{s}; d \leq 1\%$.

2SJ325

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{DS} =-30V, V _{GS} =0			-10	μ A
Gate leakage current	I _{GSS}	V _{GS} =±16V, V _{BS} =0			±10	μ A
Gate cut-off voltage	V _{GS(off)}	V _{DS} =-10V, I _D =-1mA	-1.0	-1.5	-2.0	V
Forward transfer admittance	Y _{fs}	V _{DS} =-10V, I _D =-2.0A	3.0	4.2		S
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-2.0A		0.18	0.11	Ω
		V _{GS} =-4V, I _D =-1.6A		0.15	0.24	Ω
Input capacitance	C _{iss}	V _{DS} =-10V, V _{GS} =0, f=1MHZ		800		pF
Output capacitance	C _{oss}			600		pF
Reverse transfer capacitance	C _{rss}			250		pF
Turn-on delay time	t _{d(on)}			15		ns
Rise time	t _r	V _{GS(on)} =-10V, V _{DD} =-15V, I _D =-2A R _L =7.5Ω, R _G =10Ω		65		ns
Turn-off delay time	t _{d(off)}			85		ns
Fall time	t _f			60		ns
Total Gate Charge	Q _g				28	
Gate to Source Charge	Q _{GS}	V _{GS} =-10V, I _D =-4.0A, V _{DD} =-24V		3		nC
Gate Drain Charge	Q _{GD}			11		nC
Body Diode Forward Voltage	V _F		I _F =4.0A, V _{GS} =0		0.9	
Reverse Recovery time	t _{rr}	I _F =4.0A, V _{GS} =0, di/dt=50A/μ s		65		ns
Reverse Recovery Charge	Q _{rr}				60	