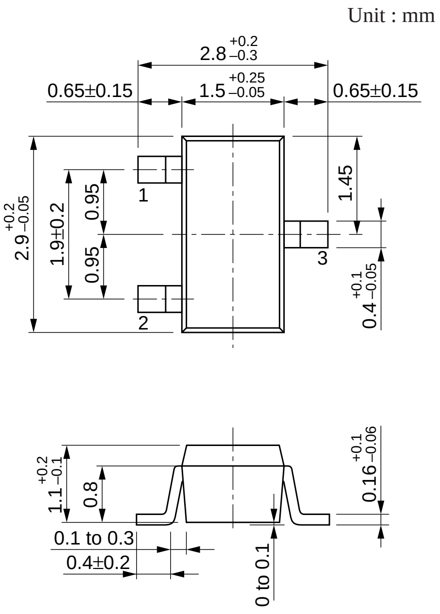
2SJ146

Silicon P-Channel MOS

For switching

■ Features

- High-speed switching
- Downsizing of sets by mini-type package and automatic insertion by taping/magazine packing are available.



1 : Gate JEDEC : TO-236
2 : Source EIAJ : SC-59
3 : Drain Mini Type Package (3-pin)

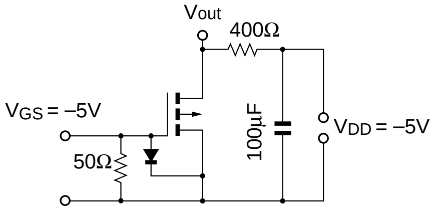
■ Absolute Maximum Ratings (Ta = 25˚C)

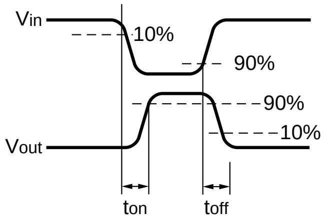
Parameter	Symbol	Rating	Unit
Drain-Source breakdown voltage	V_{DSS}	– 50	V
Gate-Source voltage	V_{GSO}	– 8	V
Drain current	I_D	–100	mA
Max drain current	I_{DP}	– 200	mA
Allowable power dissipation	P_D	150	mW
Channel temperature	T_{ch}	150	˚C
Storage temperature	T_{stg}	– 55 to +150	˚C

■ Electrical Characteristics (Ta = 25˚C)

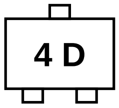
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I_{DSS}	V_{DS}= – 30V, V_{GS}= 0			–10	µA
Gate-Source leakage current	I_{GSS}	V_{GS}= – 8V, V_{DS}= 0			–1	µA
Drain-Source breakdown voltage	V_{DSS}	I_D= –100µA, V_{GS}= 0	– 50			V
Gate threshold voltage	V_{th}	V_{DS}= – 5V, I_D= –100µA	–1.5		– 3.5	V
Forward transadmittance	$\lvert Y_{fs} \rvert$	V_{DS}= –10V, I_D=10mA, f=1kHz	8			mS
Drain-Source ON-resistance	$R_{DS(on)}$	V_{GS}= – 5V, I_D= –10mA			150	Ω
Input capacitance	C_{iss}	V_{DS}= – 5V, V_{GS}= 0, f=1MHz			13	pF
Output capacitance	C_{oss}				7	pF
Feedback capacitance	C_{rss}				3	pF
Turn-on time	t_{on} *	V_{DD}= – 5V, V_{GS}= 0 to – 5V, R_L= 400Ω			40	ns
Turn-off time	t_{off} *	V_{DD}= – 5V, V_{GS}= – 5V to 0V, R_L= 400Ω			60	ns

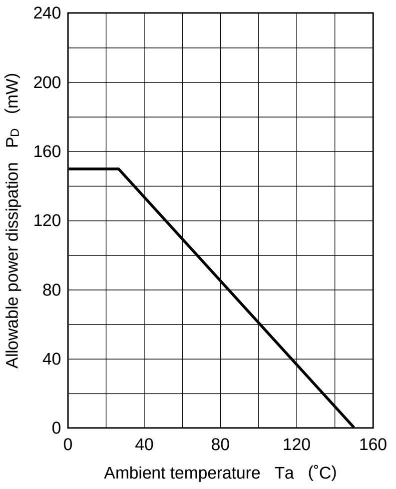
* t_{on}, t_{off} measurement circuit



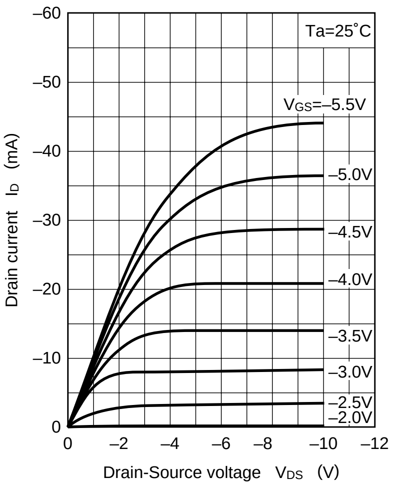


■ Marking

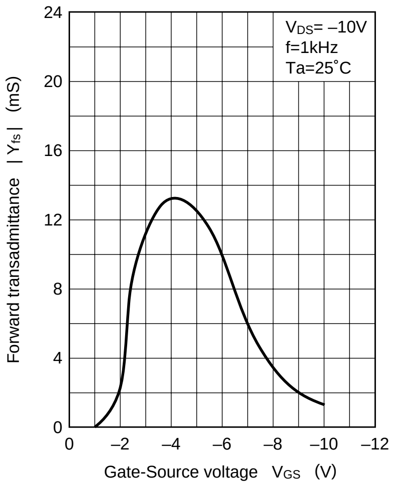




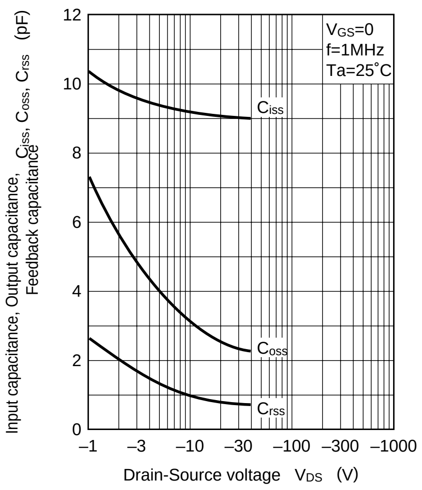
$P_D - Ta$



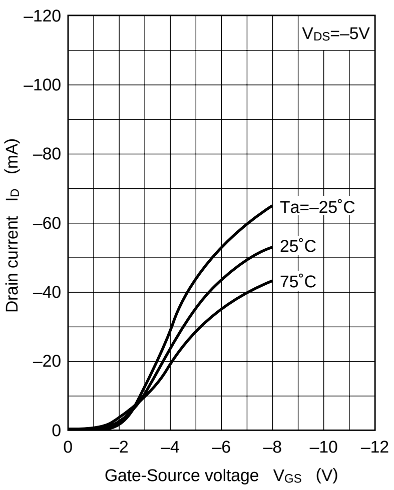
$I_{DS} - V_{DS}$



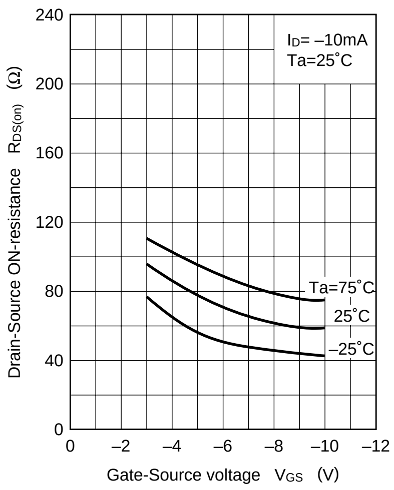
$|Y_{fs}| - V_{GS}$



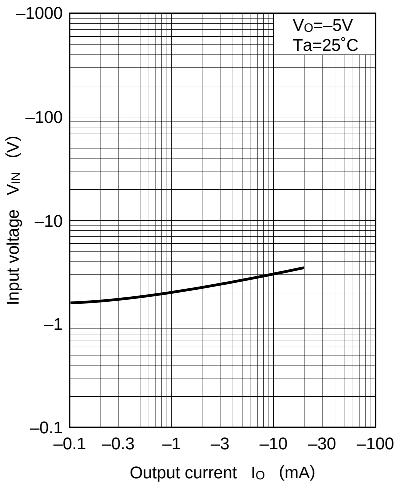
$C_{iss}, C_{oss}, C_{rss} - V_{DS}$



$I_D - V_{GS}$



$R_{DS(on)} - V_{GS}$



$V_{IN} - I_O$