Ordering number:EN4503

N-Channel Junction Silicon FET

2SK2076

Impedance Converter Applications

Applications

- Low-frequency general-purpose amplifier applications.
- Impedance conversion.
- Infrared sensor.

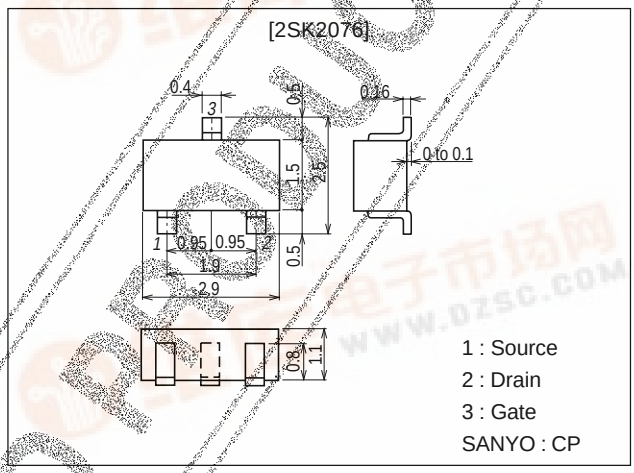
Features

- Small I_{GSS}.
- Small Ciss.

Package Dimensions

unit:mm

2050A



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		30	V
Gate-to-Drain Voltage	V_{GDS}		–30	V
Gate Current	I_G		10	mA
Drain Current	I_D		5	mA
Allowable Power Dissipation	P_D		150	mW
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	I_G=–10μA, V_{DS}=0	–30			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=10V, V_{GS}=0	0.4*		1.1*	mA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=–20V, V_{DS}=0			–1.0	nA
Cutoff Voltage	$V_{GS(off)}$	V_{DS}=10V, I_D=1μA	–0.3	–0.75	–1.5	V
Forward Transfer Admittance	$\|yfs\|$	V_{DS}=10V, V_{GS}=0, f=1kHz	1.1	1.8		mS

* : The 2SK2076 is classified by I_{DSS} as follows : (unit : mA).

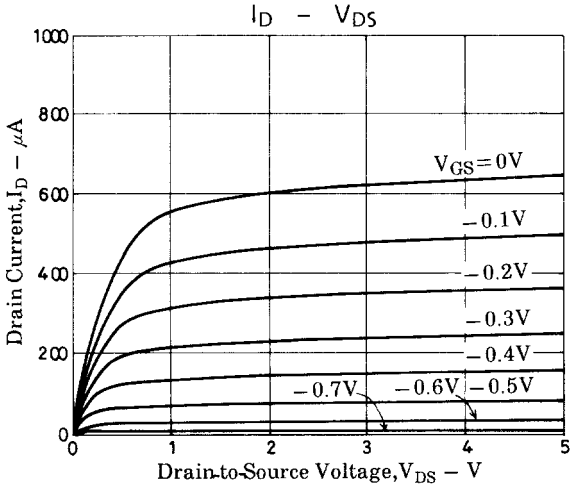
0.4	14	0.8	0.6	15	1.1

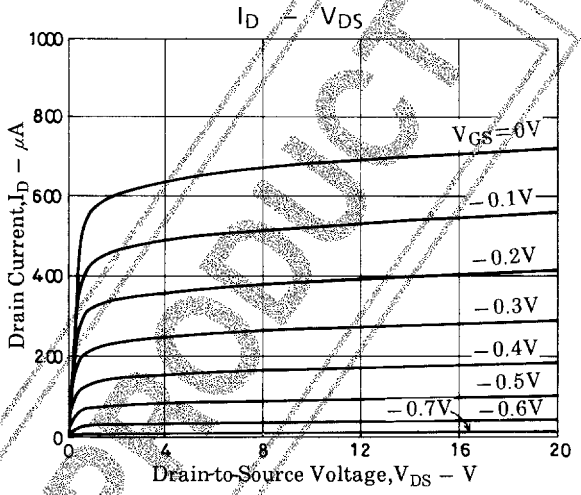
Continued on next page.

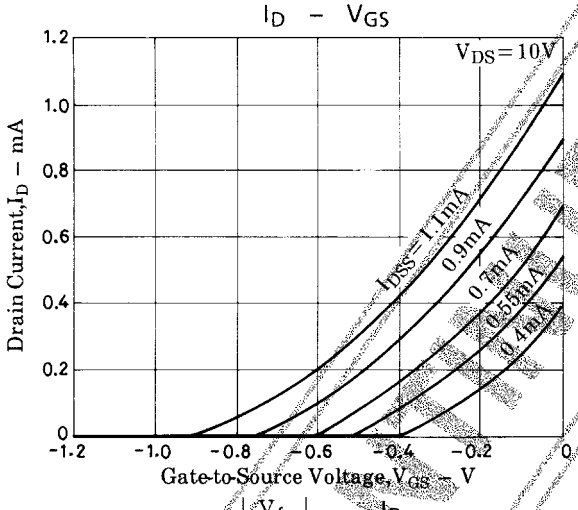
Note) Marking : H
I_{DSS} rank : 14, 15
For MCP package version, use the 2SK2091.

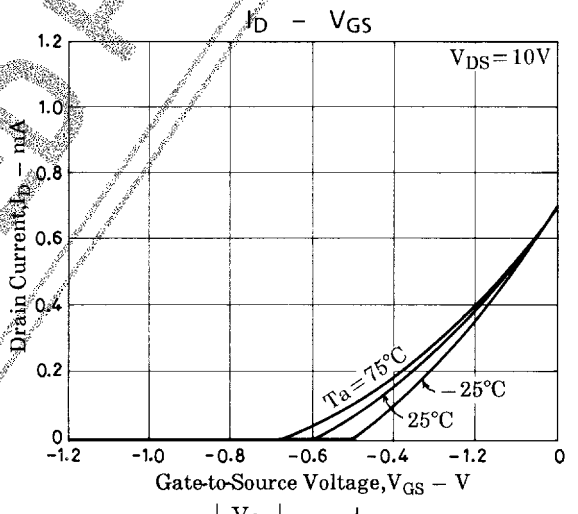
Continued from preceding page.

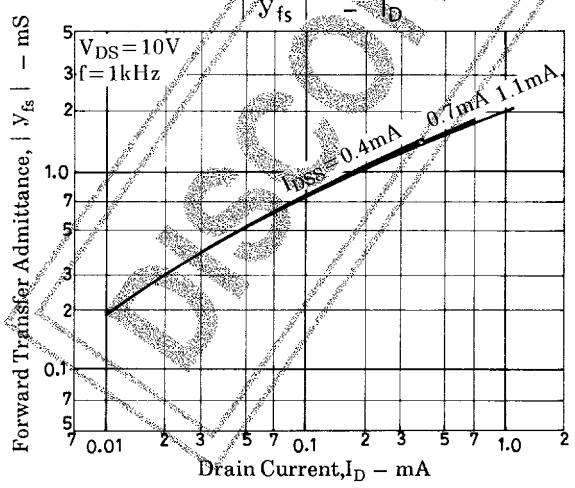
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	V_{DS}=10V, V_{GS}=0, f=1MHz		2.9		pF
Reverse Transfer Capacitance	Crss	V_{DS}=10V, V_{GS}=0, f=1MHz		1.1		pF

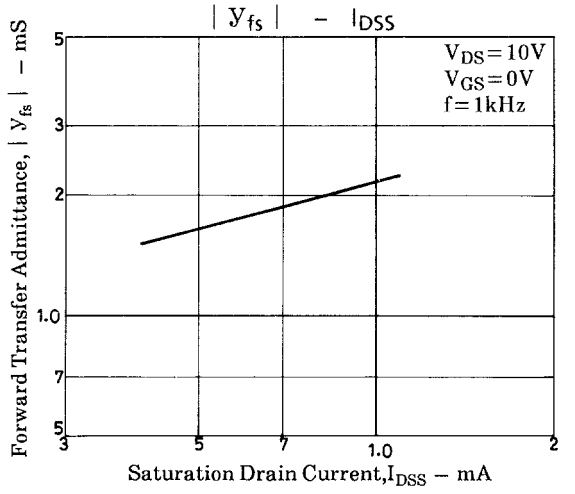




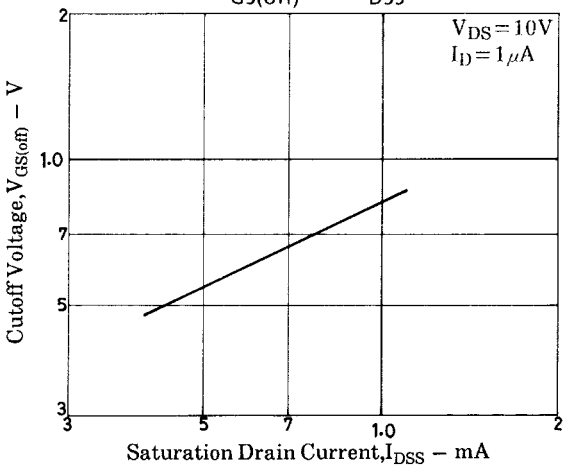




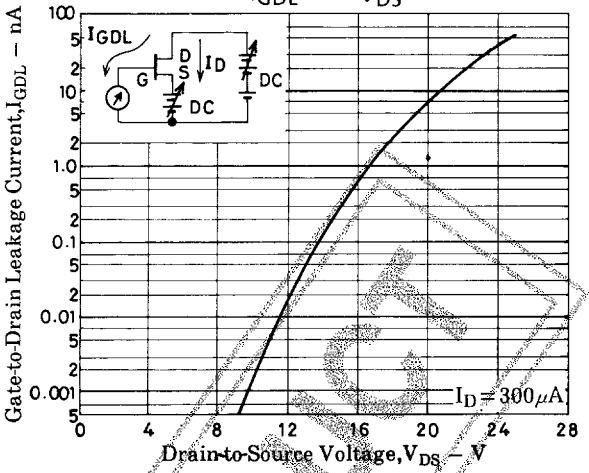




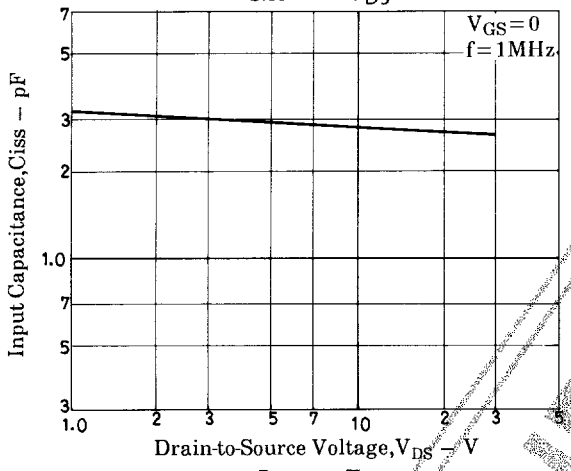
$V_{GS(off)}$ – I_{DSS}



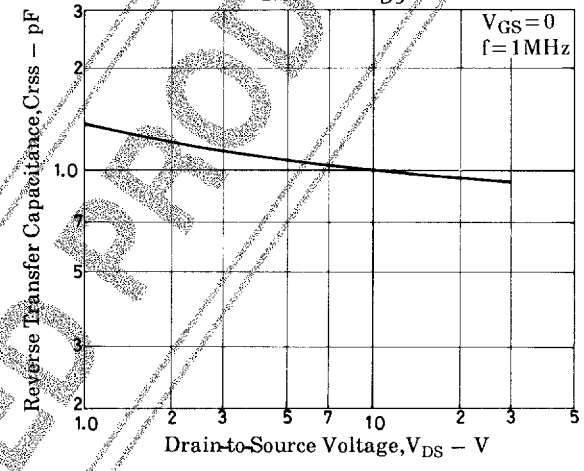
I_{GDL} – V_{DS}



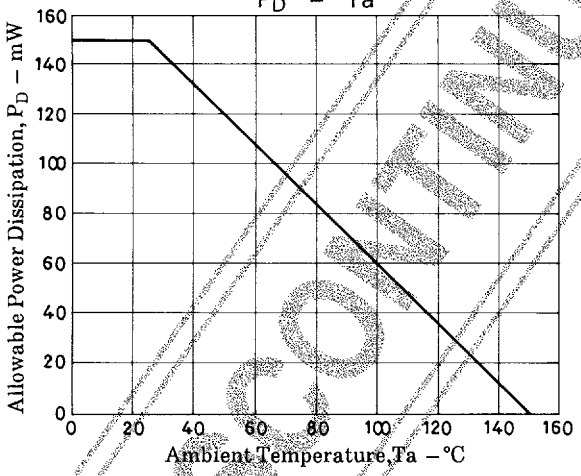
Ciss – V_{DS}



Crss – V_{DS}



P_D – Ta



2SK2076