

No.4503

2SK2076

N-Channel Junction Silicon FET

Impedance Converter Applications

Applications

- · Low-frequency general-purpose amp applications.
- · Impedance conversion.
- · Infrared sensor.

Features

- \cdot Small I_{GSS}
- · Small Ciss

Absolute Maximum Ratings at	$Ta = 25^{\circ}C$		unit
Drain-to-Source Voltage	$V_{ m DSX}$	30	V
Gate-to-Drain Voltage	V_{GDS}	-30	V
Gate Current	${f I_G}$	10	mA
Drain Current	I_{D}	5	mΑ
Allowable Power Dissipation	P_{D}	150	$\mathbf{m}\mathbf{W}$
Junction Temperature	Tj	150	$^{\circ}\mathrm{C}$
Storage Temperature	Tstg	-55 to + 150	$^{\circ}\mathrm{C}$

25°C		min	typ	max	unit
$V_{(BR)GDS}$	$I_{G} = -10 \mu A, V_{DS} = 0$	-30	_		V
I_{GSS}	$V_{GS} = -20 V$, $V_{DS} = 0$			-1.0	nΑ
$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	-0.3-	0.75	-1.5	V
I_{DSS}	$V_{DS}=10V$, $V_{GS}=0$	0.4%		1.1%	€mA
$\mid \mathbf{y}_{\mathrm{fs}} \mid$	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	1.1	1.8		mS
Ciss	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		2.9		pF
Crss	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		1.1		рF
	$\begin{array}{c} V_{(BR)GDS} \\ I_{GSS} \\ V_{GS(off)} \\ I_{DSS} \\ \mid \mathcal{Y}_{fs} \mid \\ Ciss \end{array}$	$\begin{array}{lll} V_{(BR)GDS} & I_G = -10 \mu A, V_{DS} = 0 \\ I_{GSS} & V_{GS} = -20 V, V_{DS} = 0 \\ V_{GS(off)} & V_{DS} = 10 V, I_D = 1 \mu A \\ I_{DSS} & V_{DS} = 10 V, V_{GS} = 0 \\ \mid V_{fs} \mid & V_{DS} = 10 V, V_{GS} = 0, f = 1 k Hz \\ Ciss & V_{DS} = 10 V, V_{GS} = 0, f = 1 M Hz \end{array}$	$\begin{array}{lll} V_{(BR)GDS} & I_G = -10 \mu A, V_{DS} = 0 & -30 \\ I_{GSS} & V_{GS} = -20 V, V_{DS} = 0 \\ V_{GS(off)} & V_{DS} = 10 V, I_D = 1 \mu A & -0.3 - 0.4 \times 0.4 $	$\begin{array}{lllll} V_{(BR)GDS} & I_G = -10 \mu A, V_{DS} = 0 & -30 \\ I_{GSS} & V_{GS} = -20 V, V_{DS} = 0 \\ V_{GS(off)} & V_{DS} = 10 V, I_D = 1 \mu A & -0.3 - 0.75 \\ I_{DSS} & V_{DS} = 10 V, V_{GS} = 0 & 0.4 \% \\ \mid V_{fs} \mid & V_{DS} = 10 V, V_{GS} = 0, f = 1 \text{kHz} & 1.1 & 1.8 \\ Ciss & V_{DS} = 10 V, V_{GS} = 0, f = 1 \text{MHz} & 2.9 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

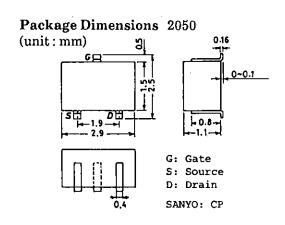
 $\mbox{\%}$: The 2SK2076 is classified by IDSS as follows (unit: mA)

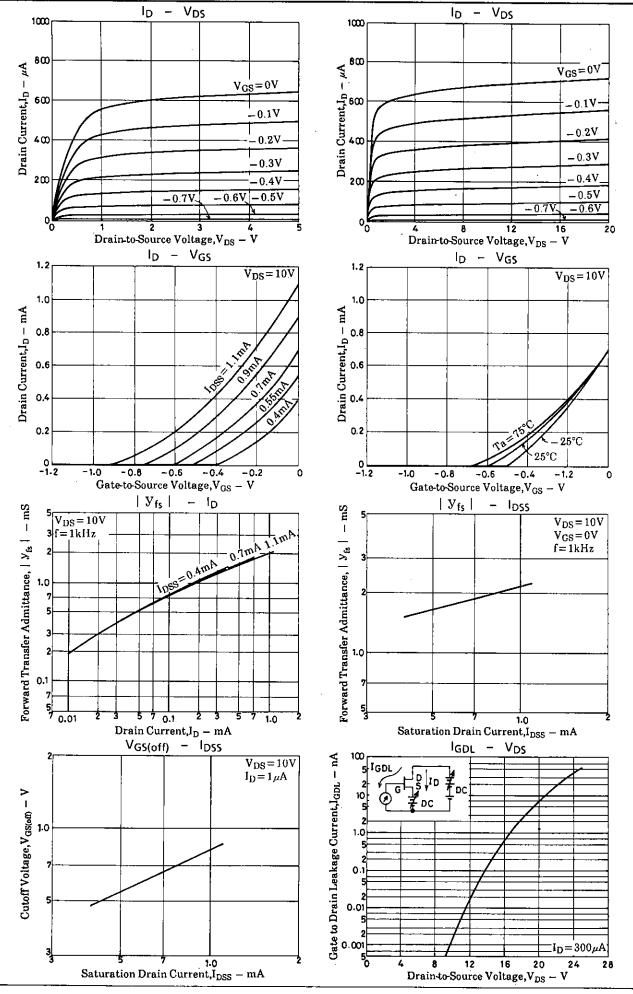
	0.4	14	0.8	0.6	15	1.1
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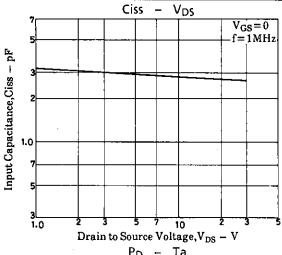
Note) Marking: H

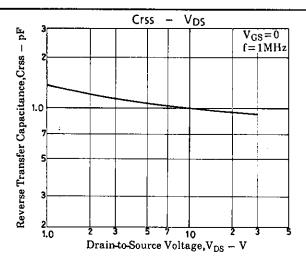
I_{DSS} rank: 14, 15

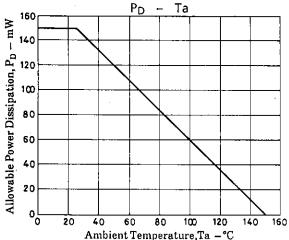
For MCP package version, use the 2SK2091.











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