Ordering number: EN 4504

SANYO

No.4504

2SK2091

N-Channel Junction Silicon FET

Impedance Converter Applications

Applications

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

Features

- Small I_{GSS}
- Small Ciss
- Very small-sized package permitting 2SK2091-applied sets to be made smaller and slimmer

Absolute Maximum Ratings at Ta = 25°C

			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

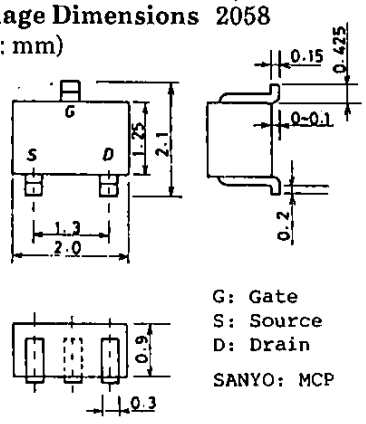
			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	−30			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			−1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	−0.3	−0.75	−1.5	V
Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	0.4※		1.1※	mA
Forward Transfer Admittance	$\|y_{fs}\|$	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	1.1	1.8		mS
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

※ : The 2SK2091 is classified by I_{DSS} as follows (unit : mA)

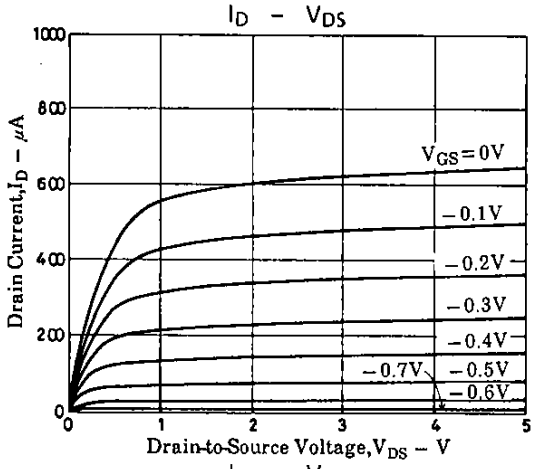
0.4	14	0.8	0.6	15	1.1

Note) Marking : H
I_{DSS} rank : 14, 15
For CP package version, use the 2SK2076.

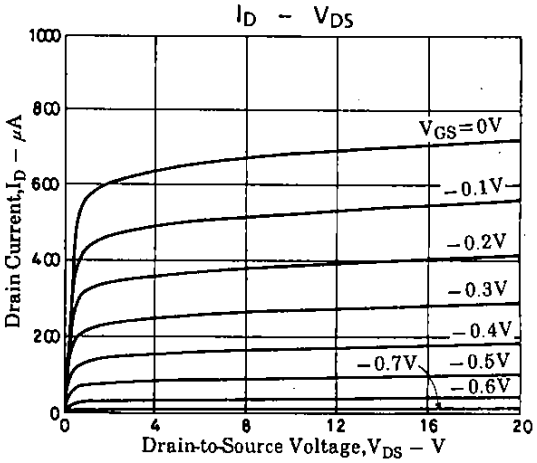
Package Dimensions 2058
(unit : mm)



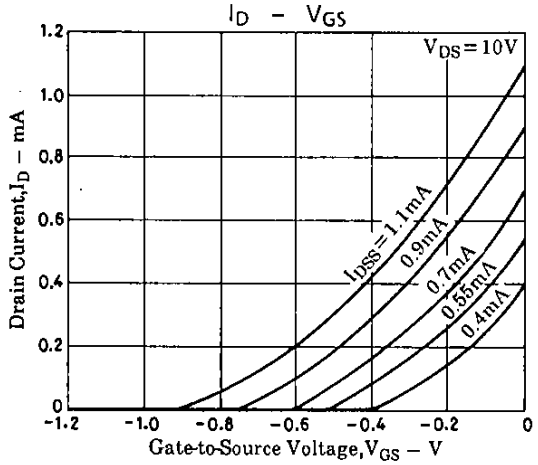
I_D – V_{DS}



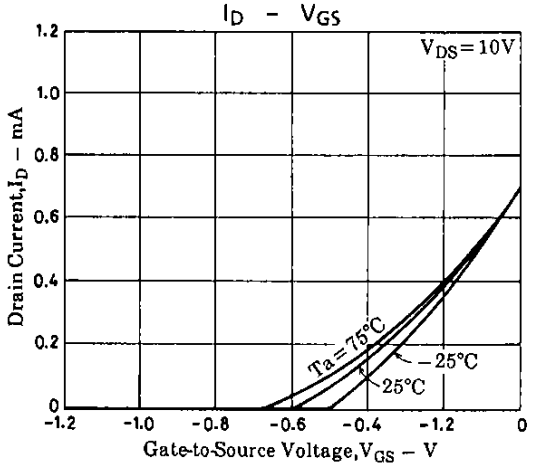
I_D – V_{DS}



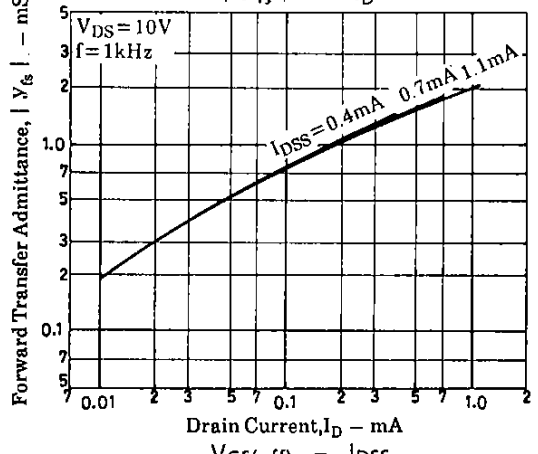
I_D – V_{GS}



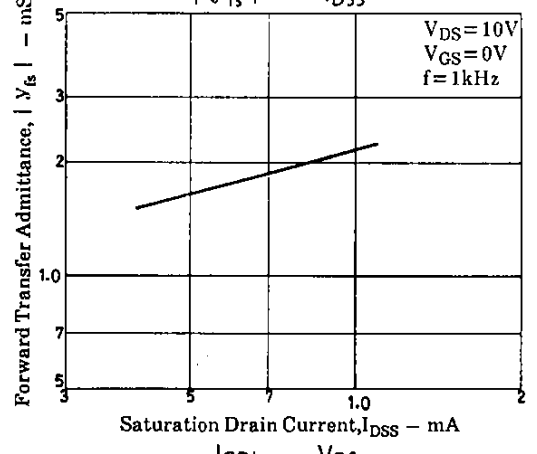
I_D – V_{GS}



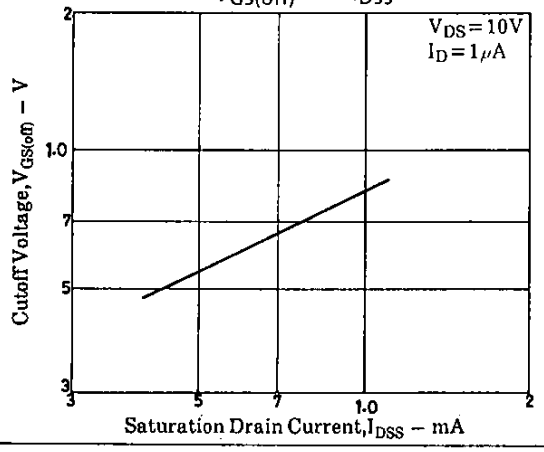
$|y_{fs}|$ – I_D



$|y_{fs}|$ – I_{DSS}



$V_{GS(off)}$ – I_{DSS}



I_{GDL} – V_{DS}