



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  $C_{iss}$
- Very small-sized package permitting 2SK2091-applied sets to be made smaller and slimmer

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

		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	$T_j$	150 °C
Storage Temperature	$T_{stg}$	-55 to +150 °C

**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu\text{A}, V_{DS} = 0$	-30			V
Gate-to-Source Leakage Current	$I_{GSS}$	$V_{GS} = -20\text{V}, V_{DS} = 0$		-1.0	nA	
Cutoff Voltage	$V_{GS(\text{off})}$	$V_{DS} = 10\text{V}, I_D = 1\mu\text{A}$	-0.3	-0.75	-1.5	V
Drain Current	$I_{DSS}$	$V_{DS} = 10\text{V}, V_{GS} = 0$	0.4*		1.1*	mA
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{kHz}$	1.1	1.8		mS
Input Capacitance	$C_{iss}$	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		2.9		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		1.1		pF

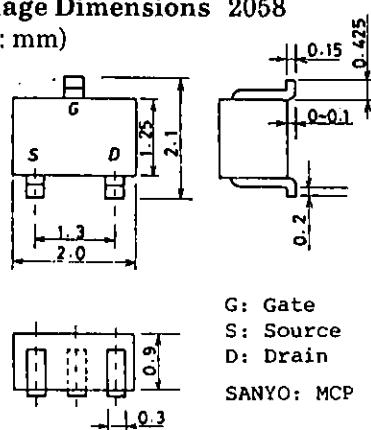
\* : The 2SK2091 is classified by  $I_{DSS}$  as follows (unit : mA)

0.4	14	0.8	0.6	15	1.1
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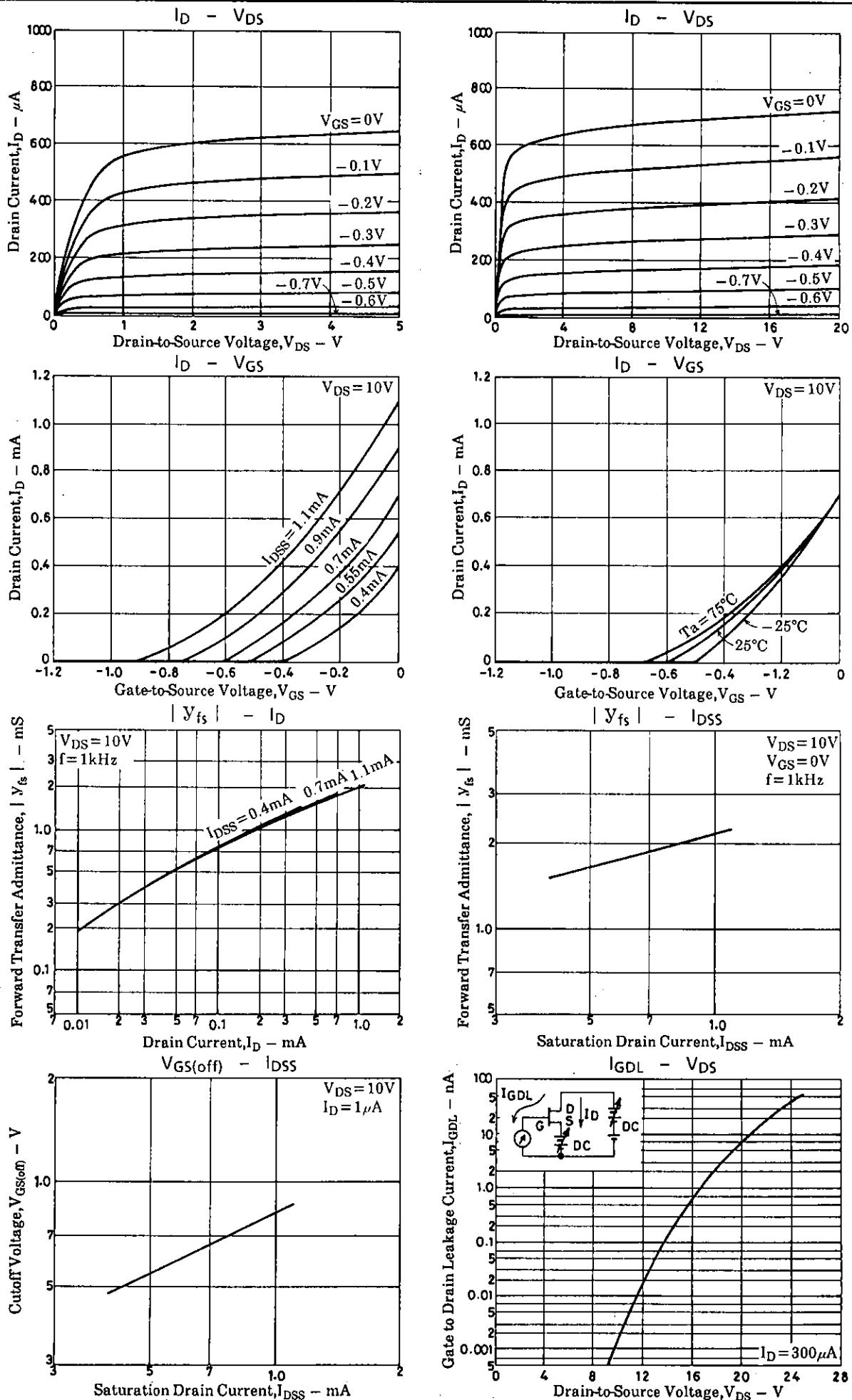
Note) Marking : H

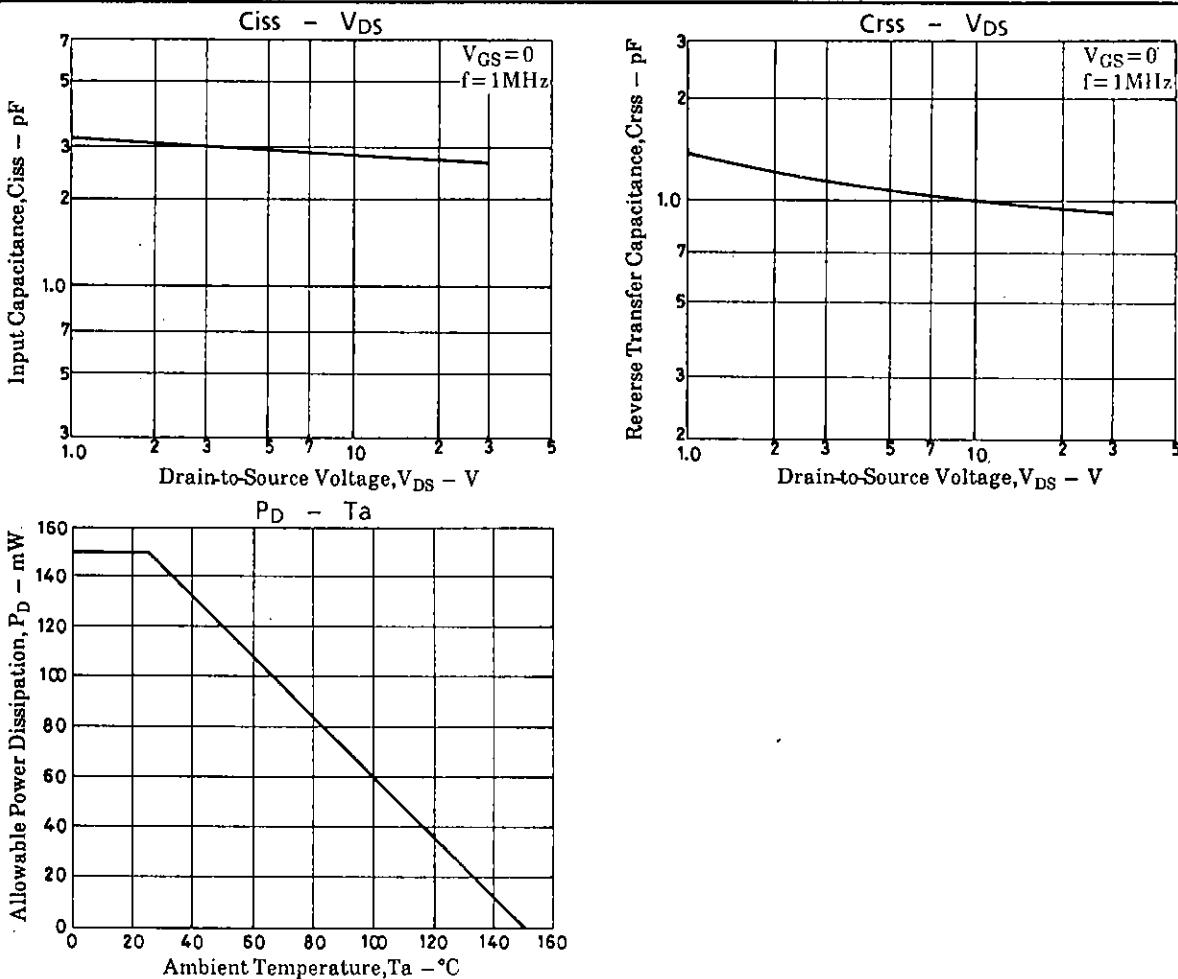
 $I_{DSS}$  rank : 14, 15

For CP package version, use the 2SK2076.

**Package Dimensions 2058**  
(unit : mm)

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