

|              |         |                                |
|--------------|---------|--------------------------------|
| <b>SANYO</b> | No.4503 | <b>2SK2076</b>                 |
|              |         | N-Channel Junction Silicon FET |

**Impedance Converter Applications**

**Applications**

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

**Features**

- Small  $I_{GSS}$
- Small  $C_{iss}$

**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         | $^\circ\text{C}$ |
| Storage Temperature         | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

**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                 | $V_{GS(off)}$ | $V_{DS} = 10\text{V}, I_D = 1\mu\text{A}$          | -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 2SK2076 is classified by  $I_{DSS}$  as follows (unit : mA)

|     |    |     |     |    |     |
|-----|----|-----|-----|----|-----|
| 0.4 | 14 | 0.8 | 0.6 | 15 | 1.1 |
|-----|----|-----|-----|----|-----|

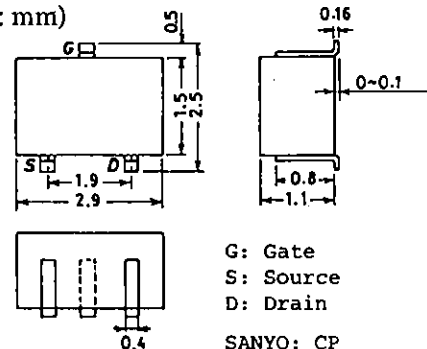
Note) Marking : H

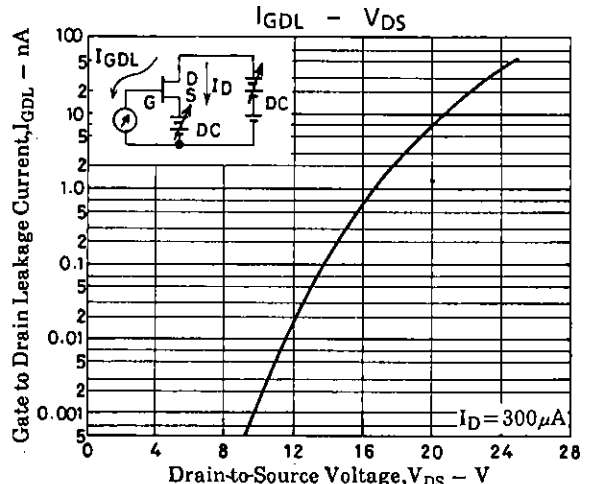
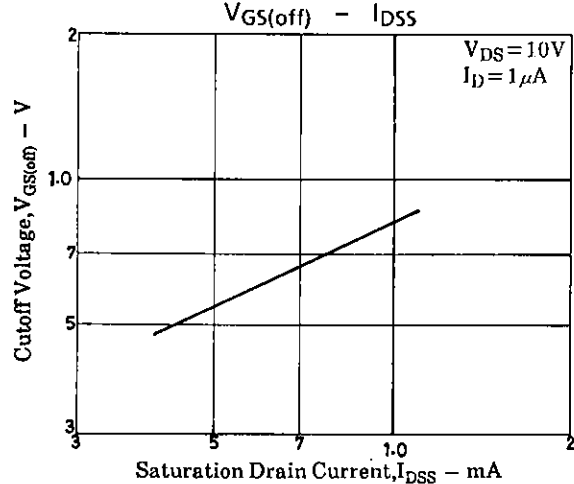
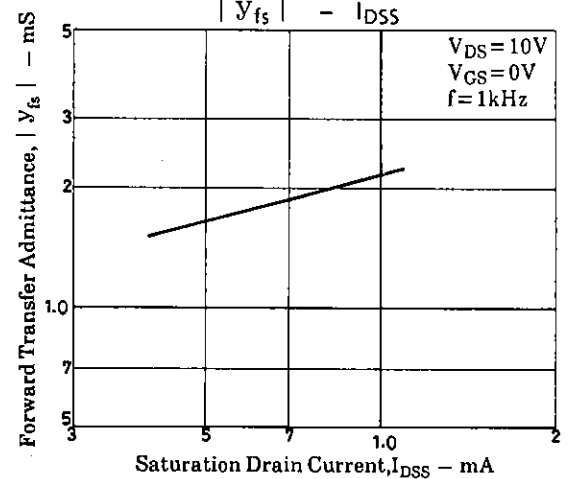
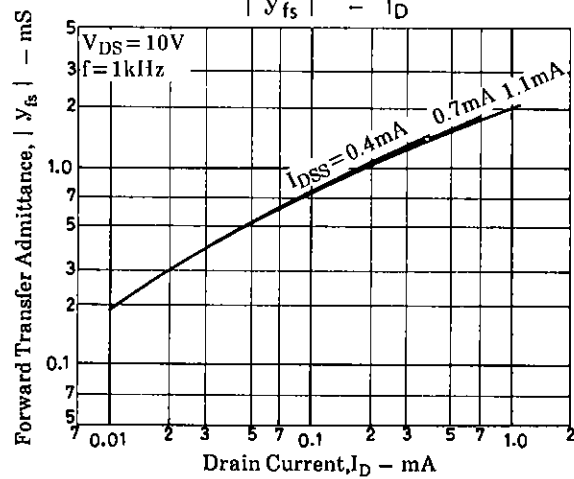
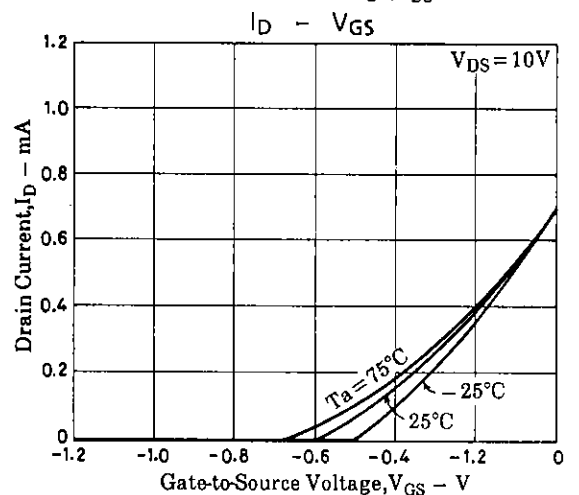
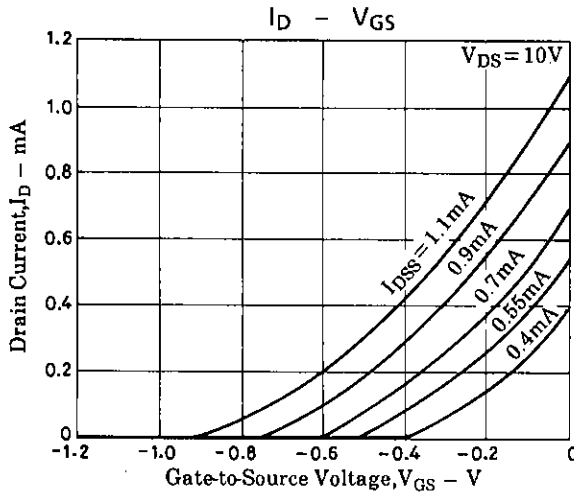
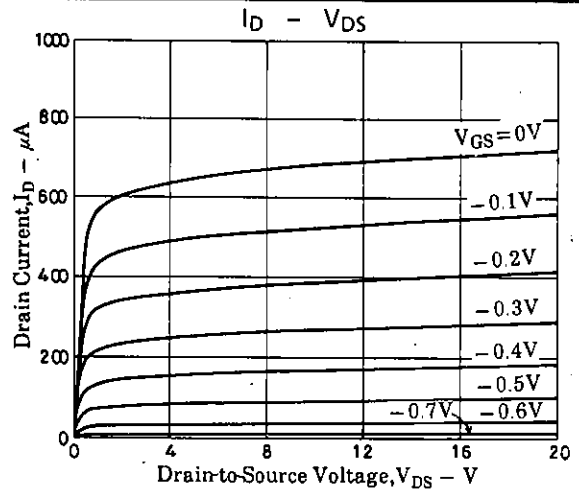
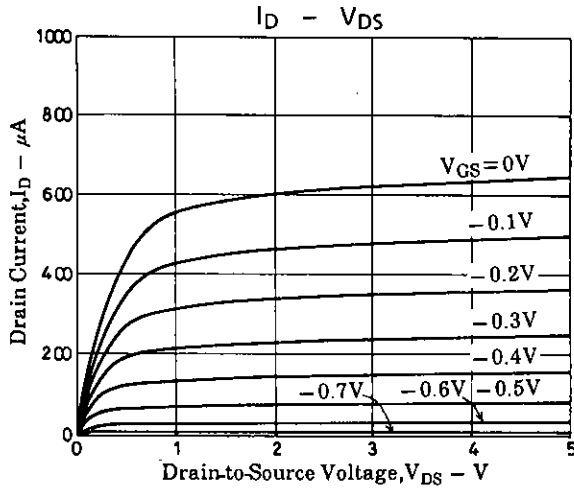
$I_{DSS}$  rank : 14, 15

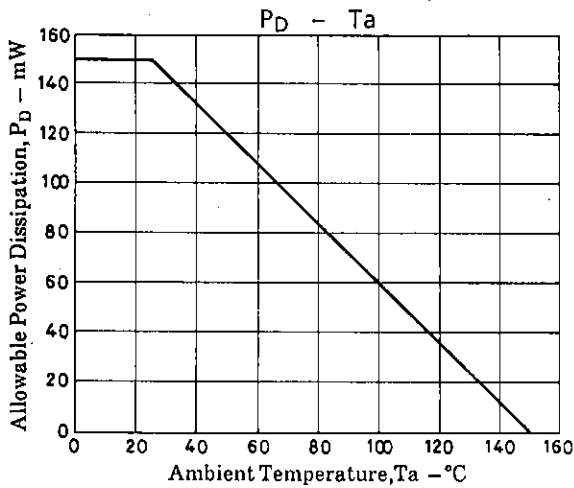
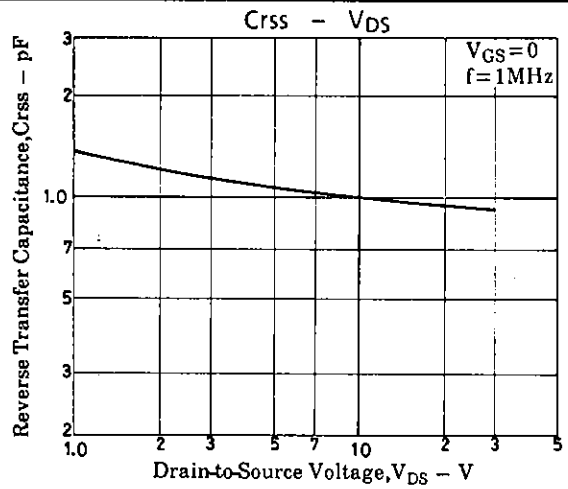
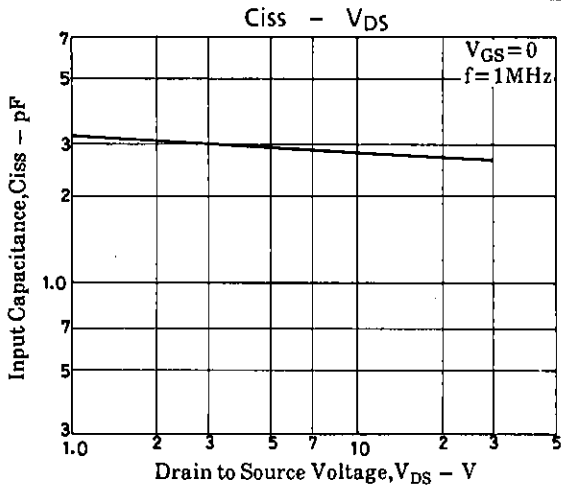
For MCP package version, use the 2SK2091.

**Package Dimensions 2050**

(unit : mm)







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