

**2SK772****AF Amplifier Applications****Applications**

- Variable resistors, analog switches, AF amplifier, constant-current circuit.

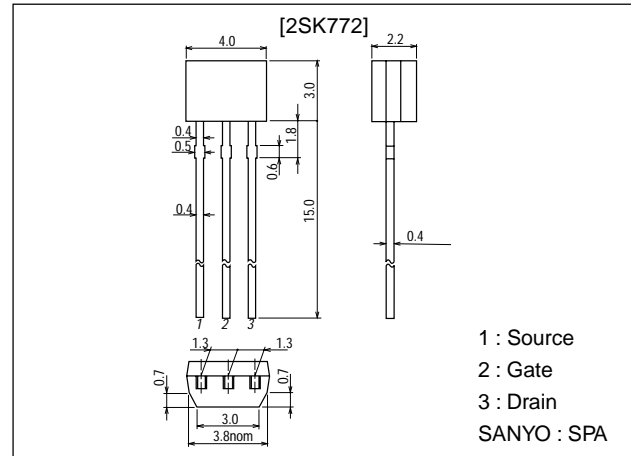
Features

- Adoption of FBET process.

Package Dimensions

unit:mm

2034A

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|-----------|------------|-------------|------|
| Drain-to-Source Voltage | V_{DSX} | | 40 | V |
| Gate-to-Source Voltage | V_{GDS} | | -40 | V |
| Gate Current | I_G | | 10 | mA |
| Drain Current | I_D | | 20 | mA |
| Allowable Power Dissipation | P_D | | 300 | mW |
| Junction Temperature | T_J | | 150 | °C |
| Storage Temperature | T_{stg} | | -55 to +150 | °C |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------------|---------------|---|---------|------|-------|------|
| | | | min | typ | max | |
| Gate-to-Drain Breakdown Voltage | $V_{(BR)GDS}$ | $I_G = -10\mu A, V_{DS} = 0$ | -40 | | | V |
| Gate-to-Source Leakage Current | I_{GSS} | $V_{GS} = -20V, V_{DS} = 0$ | | | -1.0 | nA |
| Zero-Gate Voltage Drain Current | I_{DSS}^* | $V_{DS} = 10V, V_{GS} = 0$ | 1.2* | | 12.0* | mA |
| Cutoff Voltage | $I_{GS(off)}$ | $V_{DS} = 10V, I_D = 1\mu A$ | -0.3 | -0.9 | -2.5 | V |
| Forward Transfer Admittance | $ y_{fs} $ | $V_{DS} = 10V, V_{GS} = 0, f = 1kHz$ | 4.5 | 9.0 | | mS |
| Input Capacitance | C_{iss} | $V_{DS} = 10V, V_{GS} = 0, f = 1MHz$ | | 9.0 | | pF |
| Reverse Transfer Capacitance | C_{rss} | $V_{DS} = 10V, V_{GS} = 0, f = 1MHz$ | | 2.1 | | pF |
| Noise Figure | NF | $V_{DS} = 10V, R_g = 1k\Omega, I_D = 1mA, f = 1kHz$ | | 1.5 | | dB |

* : The 2SK772 is classified by I_{DSS} as follows : (unit : mA).

| | | | | | | | | |
|-----|---|-----|-----|---|-----|-----|---|------|
| 1.2 | D | 3.0 | 2.5 | E | 6.0 | 5.0 | F | 12.0 |
|-----|---|-----|-----|---|-----|-----|---|------|

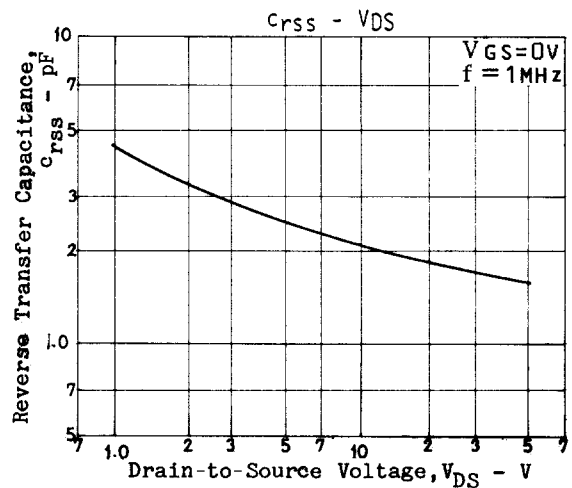
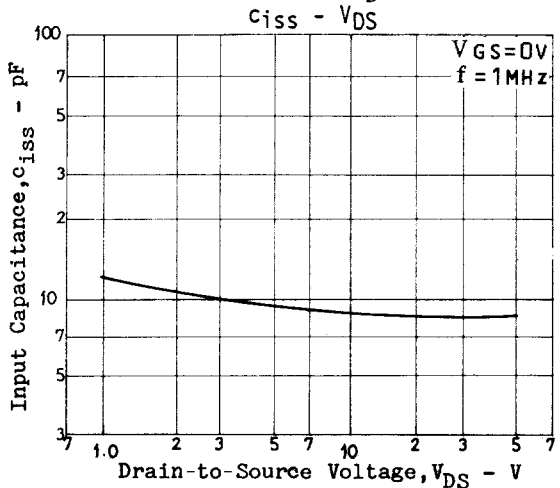
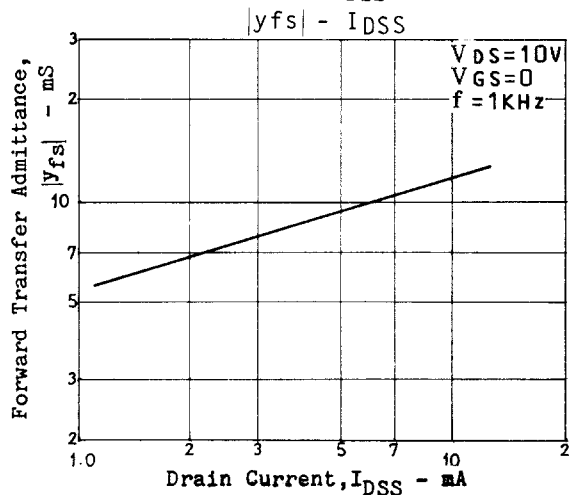
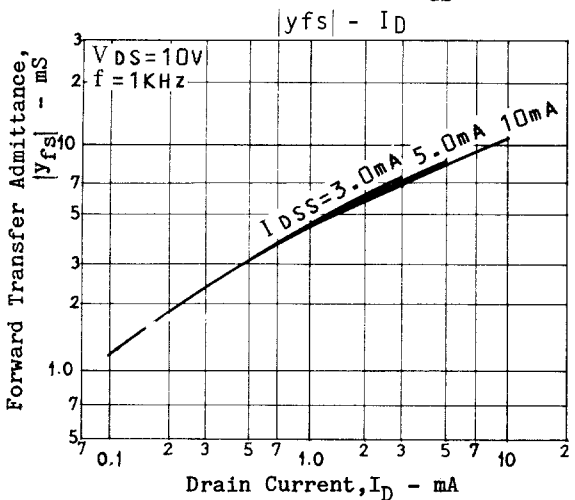
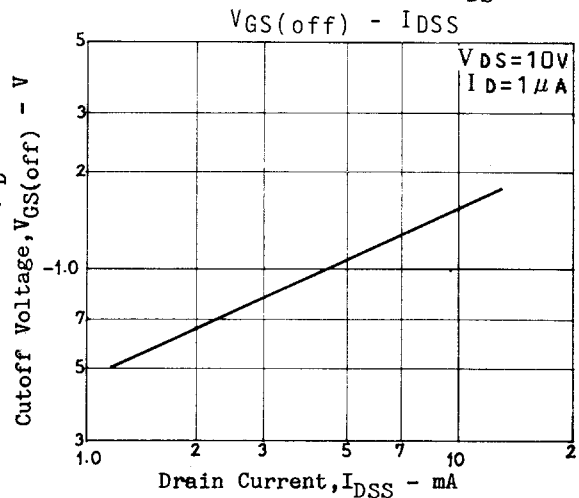
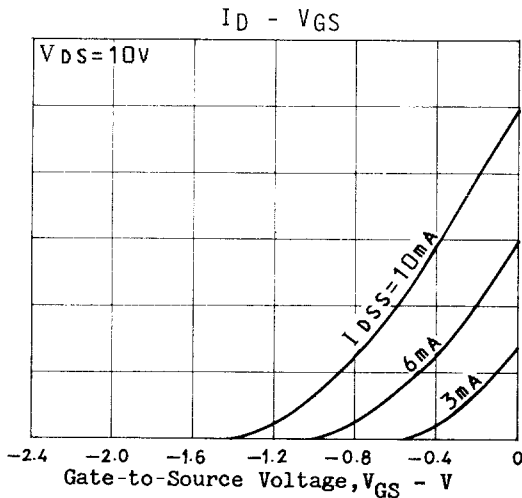
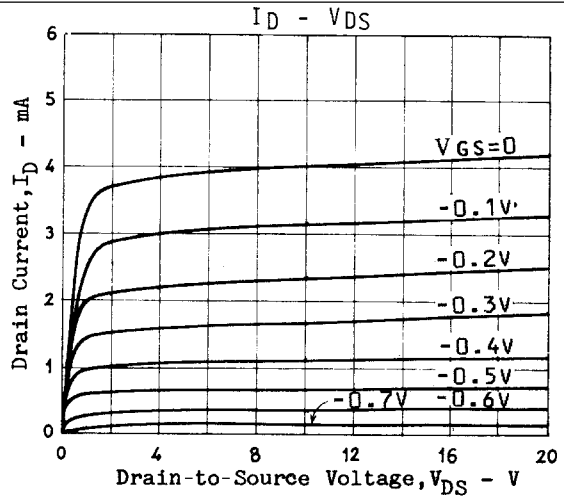
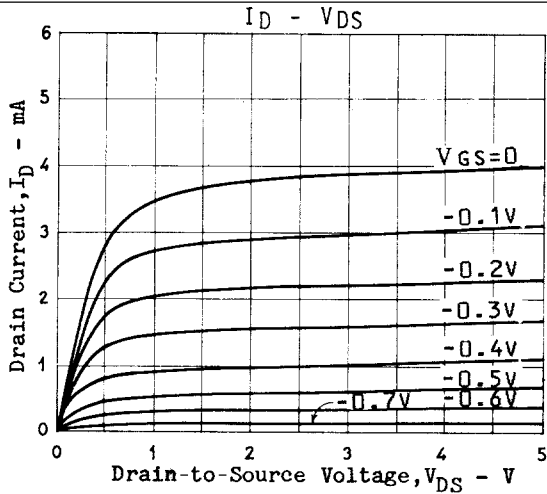
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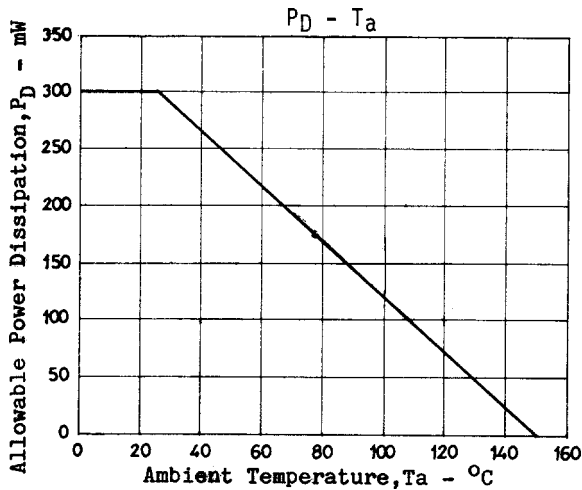
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