

# 2SJ498

FOR LOW FREQUENCY AMPLIFY APPLICATION  
P CHANNEL JUNCTION TYPE MICRO

## DESCRIPTION

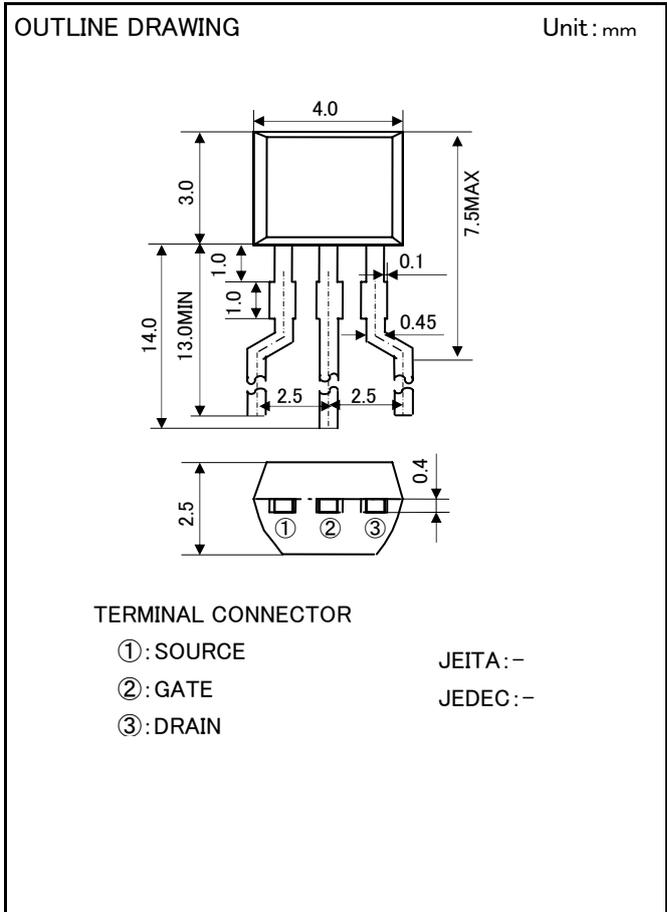
2SJ498 is a small type resin sealed P channel junction type FET.  
It is especially designed for low frequency voltage amplify, analog switch application.

## FEATURE

- High  $|y_{fs}|$   $|y_{fs}| = 4\text{mS (typ)}$
- Low  $R_{DS(ON)}$   $R_{DS(ON)} = 220\Omega \text{ (typ)}$

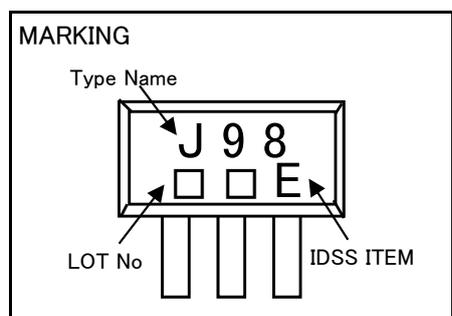
## APPLYCATION

General purpose voltage amplify, analog switch circuit for stereo, cassette deck, VTR.



## MAXIMUN RATINGS (Ta=25°C)

| Symbol    | Parameter                   | Ratings    | Unit |
|-----------|-----------------------------|------------|------|
| $V_{GDO}$ | Gate to Drain voltage       | 50         | V    |
| $I_G$     | Gate current                | -10        | mA   |
| PT        | Total allowable dissipation | 450        | mW   |
| Tch       | Channel temperature         | +150       | °C   |
| Tstg      | Storage temperature         | -55 ~ +150 | °C   |



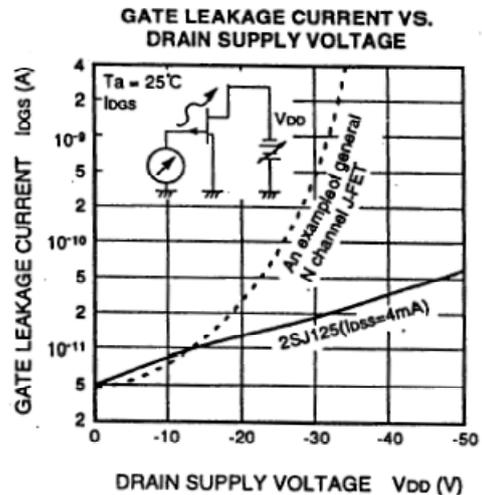
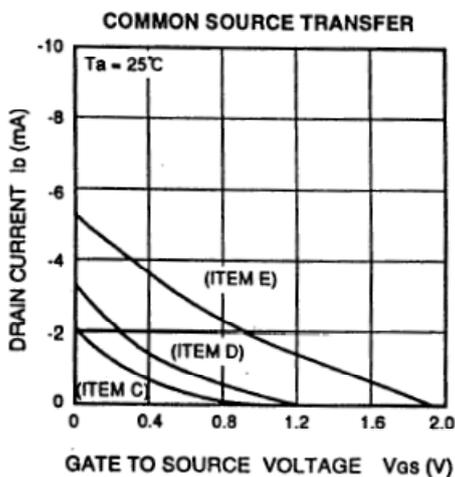
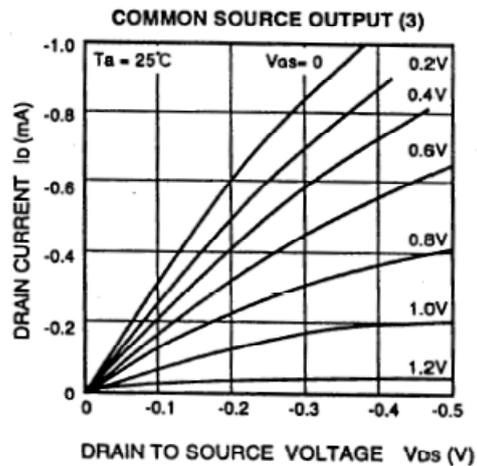
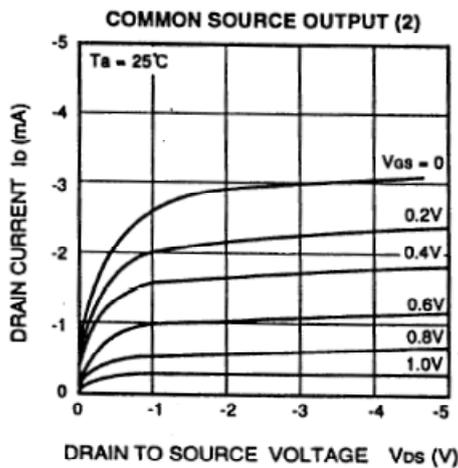
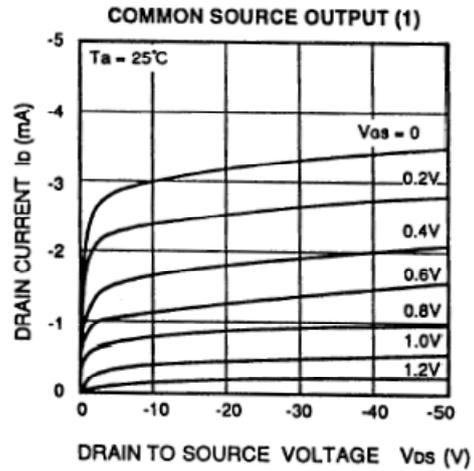
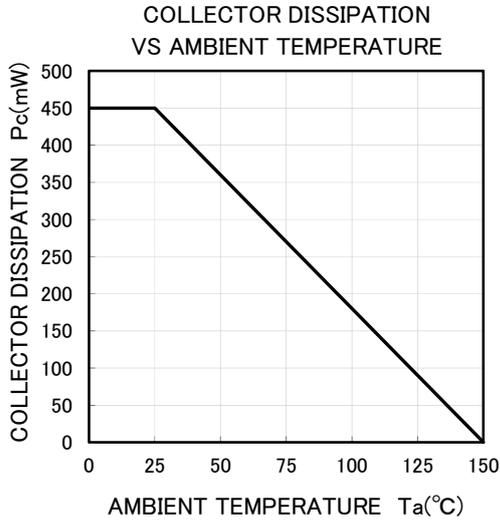
## ELECTRICAL CHARACTERISTICS (Ta=25°C)

| Symbol        | Parameter                       | Test conditions  | Limits |      |     | Unit     |
|---------------|---------------------------------|--|--------|------|-----|----------|
|               |                                 |  | Min    | Typ  | Max |          |
| $V_{(BR)GDO}$ | Gate to Drain breakdown voltage | $I_G = 10\mu\text{A}$ , $I_S = 0\text{mA}$                                       | 50     | -    | -   | V        |
| $I_{GSS}$     | Gate leakage current            | $V_{GS} = 30\text{V}$ , $V_{DS} = 0\text{V}$                                     | -      | -    | 1   | nA       |
| IDSS *        | Drain current                   | $V_{DS} = -10\text{V}$ , $V_{GS} = 0\text{V}$                                    | -0.6   | -4.0 | -12 | mA       |
| $V_{GS(OFF)}$ | Cut off voltage                 | $V_{DS} = -10\text{V}$ , $I_D = -10\mu\text{A}$                                  | 0.2    | 1.5  | 6.0 | V        |
| $ y_{fs} $    | Forward transfer admittance     | $V_{DS} = -10\text{V}$ , $V_{GS} = 0\text{V}$ , $f = 1\text{kHz}$                | 1.5    | 4.0  | -   | mS       |
| Ciss          | Input capacitance               | $V_{DS} = -10\text{V}$ , $V_{GS} = 0\text{V}$ , $f = 1\text{MHz}$                | -      | 18   | -   | pF       |
| RDS(ON)       | Drain to Source resistor        | $V_{DS} = 10\text{mVrms (1kHz)}$ , $V_{GS} = 0\text{V}$ , $I_{DSS} = 5\text{mA}$ | -      | 220  | -   | $\Omega$ |

\* : It shows IDSS classification in right table.

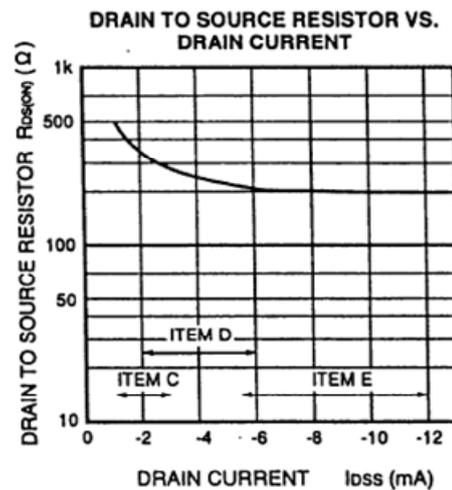
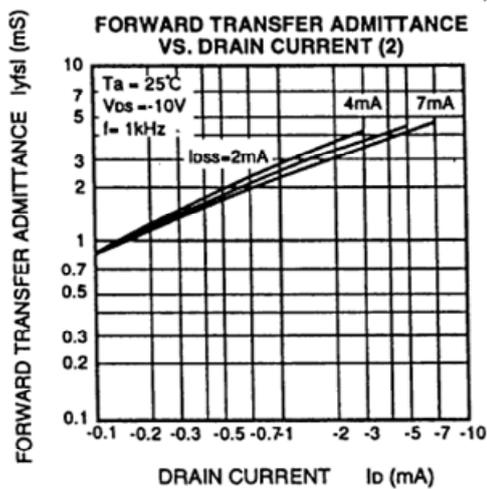
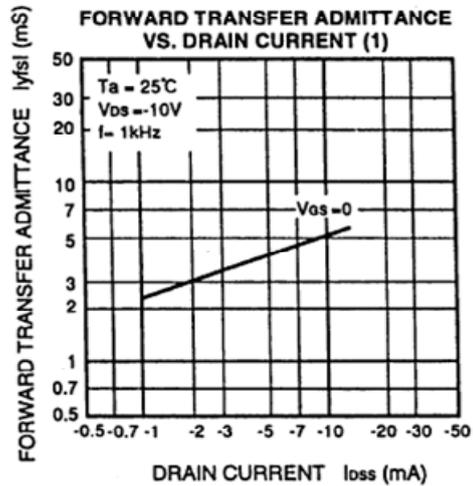
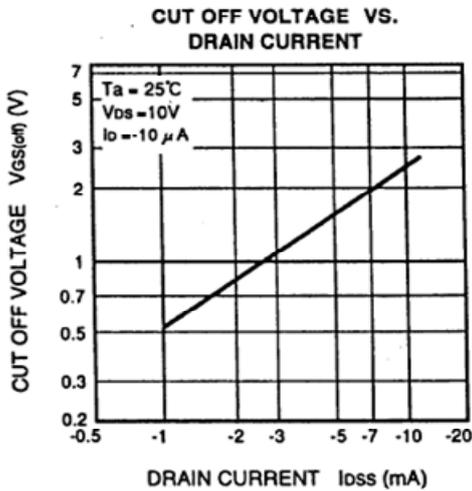
| ITEM     | B         | C         | D         | E        |
|----------|-----------|-----------|-----------|----------|
| IDSS(mA) | 0.6 ~ 1.5 | 1.0 ~ 3.0 | 2.5 ~ 6.0 | 5.0 ~ 12 |

**TYPICAL CHARACTERISTICS**

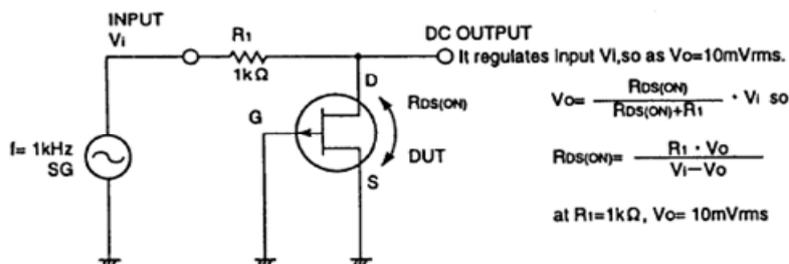


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FOR LOW FREQUENCY AMPLIFY APPLICATION  
P CHANNEL JUNCTION TYPE MICRO



**DRAIN TO SOURCE RESISTOR  $R_{ds(on)}$  TEST CIRCUIT**





**Keep safety first in your circuit designs!**

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