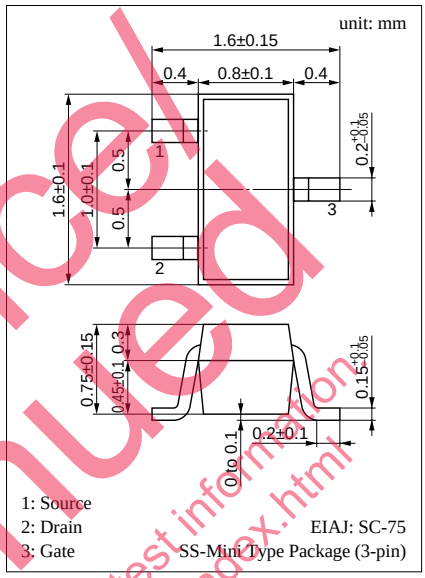
# 2SK2988

## Silicon N-Channel Junction FET

For impedance conversion in low frequency
For pyroelectric sensor




Marking Symbol: HS

### ■ Features

- Low noise-figure (NF)
- High gate to drain voltage $V_{GDO}$
- SS-mini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.

### ■ Absolute Maximum Ratings (Ta = 25 ± 3°C)

| Parameter | Symbol | Ratings | Unit |
|---|---|---|---|
| Gate to Drain voltage | $V_{GDS}$ | −40 | V |
| Drain current | $I_D$ | 10 | mA |
| Gate current | $I_G$ | 2 | mA |
| Allowable power dissipation | $P_D$ | 125 | mW |
| Channel temperature | $T_{ch}$ | 125 | °C |
| Storage temperature | $T_{stg}$ | −55 to +150 | °C |

### ■ Electrical Characteristics (Ta = 25 ± 3°C)

| Parameter | Symbol | Conditions | min | typ | max | Unit |
|---|---|---|---|---|---|---|
| Drain to Source cut-off current | $I_{DSS}$ | $V_{DS}$ = 10V, $V_{GS}$ = 0 | 1.4 | | 4.7 | mA |
| Gate to Source leakage current | $I_{GSS}$ | $V_{GS}$ = −20V, $V_{DS}$ = 0 | | | −1 | nA |
| Gate to Drain voltage | $V_{GDS}$ | $I_G$ = −100µA, $V_{DS}$ = 0 | −40 | | | V |
| Gate to Source cut-off voltage | $V_{GS(C)}$ | $V_{DS}$ = 10V, $I_D$ = 1µA | | | −3.5 | V |
| Forward transfer admittance | $\|Y_{fs}\|$ | $V_{DS}$ = 10V, $I_D$ = 1µA, f = 1kHz | 2.5 | | | mS |
| Input capacitance (Common Source) | $C_{iss}$ | $V_{DS}$ = 10V, $V_{GS}$ = 0, f = 1MHz | | 5 | | pF |
| Output capacitance (Common Source) | $C_{oss}$ | | | 1 | | pF |
| Reverse transfer capacitance (Common Source) | $C_{rss}$ | | | 1 | | pF |

Note: The test method to comply with JISC7030, Field effect transistor test method.

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