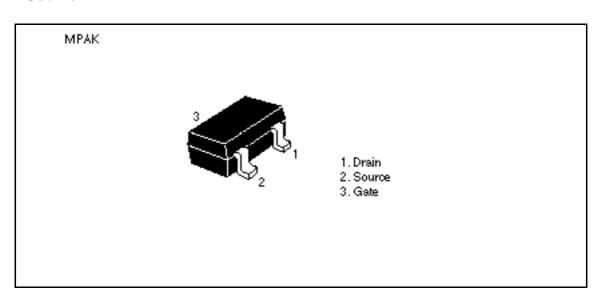
Silicon N-Channel Junction FET

HITACHI

Application

HF wide band amplifier

Outline



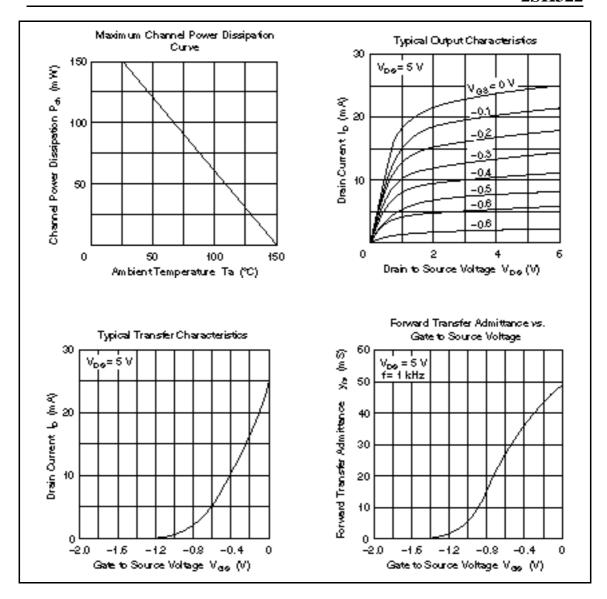
Absolute Maximum Ratings ($Ta = 25^{\circ}C$)

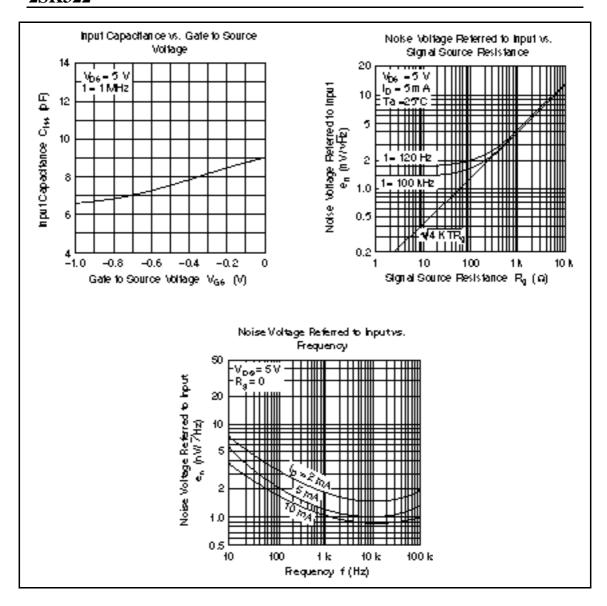
| Item | Symbol | Ratings | Unit |
|---------------------------|------------------|-------------|------|
| Gate to drain voltage | V_{GDO} | – 15 | V |
| Gate to source voltage | $V_{\rm gso}$ | – 15 | V |
| Drain current | I _D | 50 | mA |
| Gate current | I _G | 5 | mA |
| Channel power dissipation | Pch | 150 | mW |
| Channel temperature | Tch | 150 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |



Electrical Characteristics ($Ta = 25^{\circ}C$)

| Item | | Symbol | l Min | Тур | Max | Unit | Test conditions | | |
|--|------------------|---------------------------|-------|-----|----------|------|---|--|--|
| Gate to dr | rain breakdown | $V_{(BR)GDO}$ | -15 | _ | _ | V | I _G = -100 μA | | |
| Gate to so voltage | ource breakdow | $V_{(BR)GSO}$ | -15 | _ | _ | V | I _G = -100 μA | | |
| Gate cuto | ff current | I _{GSS} | _ | _ | -10 | nA | $V_{GS} = -7 \text{ V}, V_{DS} = 0$ | | |
| Drain curr | ent | I _{DSS} *1 | 5 | _ | 50 | mA | $V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ (pulse)}$ | | |
| Gate to so | ource cutoff vol | tage V _{GS(off)} | _ | _ | -3.0 | V | $V_{DS} = 5 \text{ V}, I_{D} = 100 \mu\text{A}$ | | |
| Forward to | ransfer admitta | nce y _{fs} | 25 | 45 | _ | mS | $V_{DS} = 5 \text{ V}, V_{GS} = 0, f = 1 \text{ kHz}$ | | |
| Note: 1. The 2SK322 is grouped by I _{DSS} as follows. | | | | | | | | | |
| Grade | P | Q | R | | S | Т | | | |
| Mark | WP | WQ | WR | | WS | W | Γ | | |
| I _{DSS} | 5 to 16 | 14 to 24 | 20 to | 32 | 28 to 42 | 36 | to 50 | | |





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