
2SK322

Silicon N-Channel Junction FET

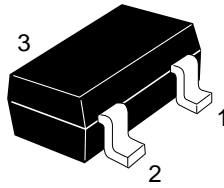
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Application

HF wide band amplifier

Outline

MPAK



1. Drain
2. Source
3. Gate

2SK322

Absolute Maximum Ratings (Ta = 25°C)

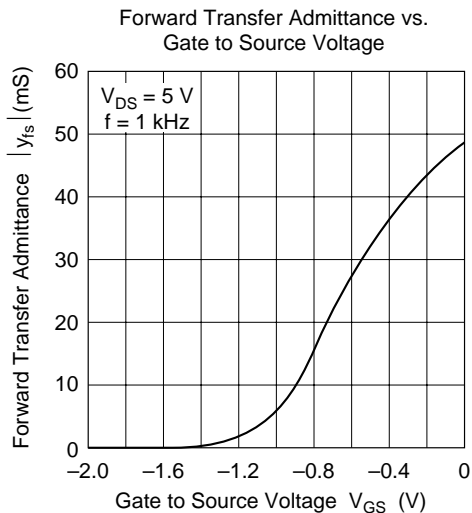
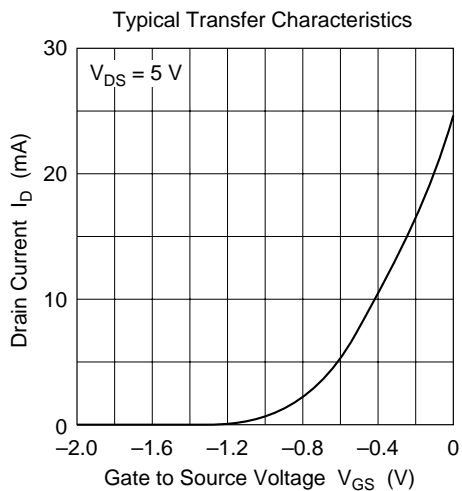
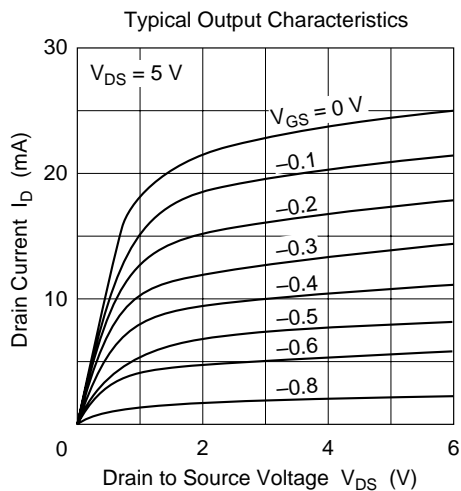
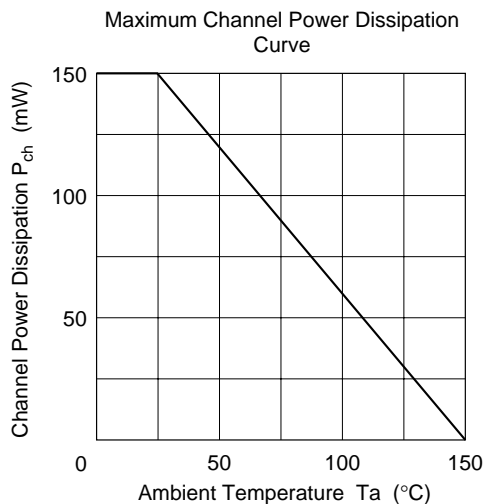
| Item | Symbol | Ratings | Unit |
|---------------------------|-----------|-------------|------|
| Gate to drain voltage | V_{GDO} | -15 | V |
| Gate to source voltage | V_{GSO} | -15 | V |
| Drain current | I_D | 50 | mA |
| Gate current | I_G | 5 | mA |
| Channel power dissipation | Pch | 150 | mW |
| Channel temperature | Tch | 150 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |

Electrical Characteristics (Ta = 25°C)

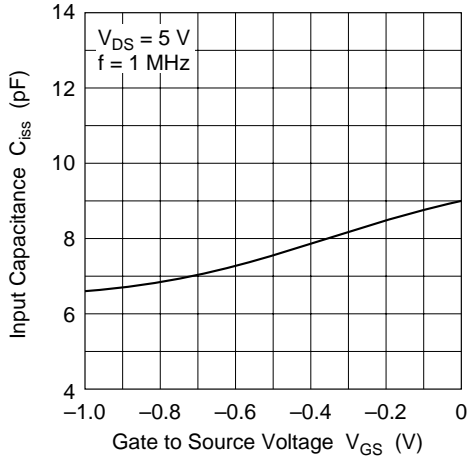
| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|----------------------------------|----------------|-----|-----|------|------|---------------------------------------|
| Gate to drain breakdown voltage | $V_{(BR)GDO}$ | -15 | — | — | V | $I_G = -100 \mu A$ |
| Gate to source breakdown voltage | $V_{(BR)GSO}$ | -15 | — | — | V | $I_G = -100 \mu A$ |
| Gate cutoff current | I_{GSS} | — | — | -10 | nA | $V_{GS} = -7 V, V_{DS} = 0$ |
| Drain current | I_{DSS}^{*1} | 5 | — | 50 | mA | $V_{DS} = 5 V, V_{GS} = 0$ (pulse) |
| Gate to source cutoff voltage | $V_{GS(off)}$ | — | — | -3.0 | V | $V_{DS} = 5 V, I_D = 100 \mu A$ |
| Forward transfer admittance | $ y_{fs} $ | 25 | 45 | — | mS | $V_{DS} = 5 V, V_{GS} = 0, f = 1 kHz$ |

Note: 1. The 2SK322 is grouped by I_{DSS} as follows.

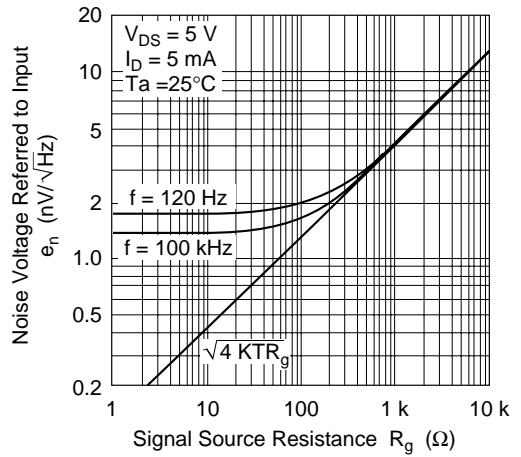
| Grade | P | Q | R | S | T |
|-----------|---------|----------|----------|----------|----------|
| Mark | WP | WQ | WR | WS | WT |
| I_{DSS} | 5 to 16 | 14 to 24 | 20 to 32 | 28 to 42 | 36 to 50 |



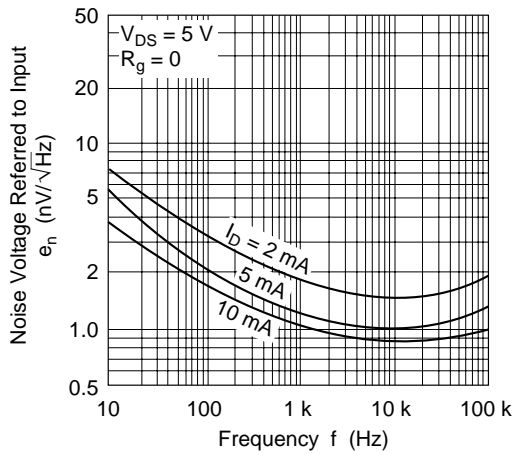
Input Capacitance vs. Gate to Source Voltage

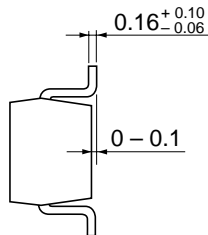
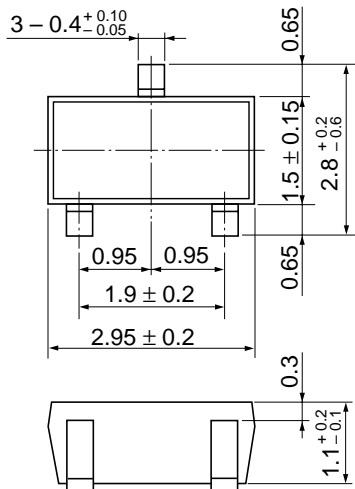


Noise Voltage Referred to Input vs. Signal Source Resistance



Noise Voltage Referred to Input vs. Frequency





| | |
|--------------------------|----------|
| Hitachi Code | MPAK |
| JEDEC | — |
| EIAJ | Conforms |
| Weight (reference value) | 0.011 g |

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Hitachi, Ltd.

Semiconductor & Integrated Circuits.
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan
Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

URL North America : <http://semiconductor.hitachi.com/>
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For further information write to:

Hitachi Semiconductor
(America) Inc.
179 East Tasman Drive,
San Jose, CA 95134
Tel: <1> (408) 433-1990
Fax: <1> (408) 433-0223

Hitachi Europe GmbH
Electronic components Group
Dornacher Straße 3
D-85622 Feldkirchen, Munich
Germany
Tel: <49> (89) 9 9180-0
Fax: <49> (89) 9 29 30 00

Hitachi Europe Ltd.
Electronic Components Group.
Whitebrook Park
Lower Cookham Road
Maidenhead
Berkshire SL6 8YA, United Kingdom
Tel: <44> (1628) 585000
Fax: <44> (1628) 778322

Hitachi Asia Pte. Ltd.
16 Collyer Quay #20-00
Hitachi Tower
Singapore 049318
Tel: 535-2100
Fax: 535-1533

Hitachi Asia Ltd.
Taipei Branch Office
3F, Hung Kuo Building, No.167,
Tun-Hwa North Road, Taipei (105)
Tel: <886> (2) 2718-3666
Fax: <886> (2) 2718-8180

Hitachi Asia (Hong Kong) Ltd.
Group III (Electronic Components)
7/F., North Tower, World Finance Centre,
Harbour City, Canton Road, Tsim Sha Tsui,
Kowloon, Hong Kong
Tel: <852> (2) 735 9218
Fax: <852> (2) 730 0281
Telex: 40815 HITEC HX

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