
2SK2794

Silicon N Channel MOS FET
UHF Power Amplifier

HITACHI

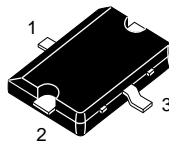
ADE-208-465 (Z)
1st. Edition
September. 1996

Features

- ¥ High power output, High gain, High efficiency
PG = 8.0dB, Pout = 31dBm, $\eta_D = 60\%$ min. (f = 836.5MHz)
- ¥ Compact package capable of surface mounting

Outline

RP8P



1. Gate
2. Source
3. Drain

This Device is sensitive to Electro Static Discharge.
An Adequate handling procedure is requested.

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Absolute Maximum Ratings (Ta = 25°C)

| Item | Symbol | Ratings | Unit |
|-------------------------|--------------------------------------|-------------|------|
| Drain to source voltage | V _{DSS} | 10 | V |
| Gate to source voltage | V _{GSS} | ±6 | V |
| Drain current | I _D | 0.7 | A |
| Drain peak current | I _{D(pulse)} * ¹ | 1.4 | A |
| Channel dissipation | P _{ch} * ² | 3 | W |
| Channel temperature | T _{ch} | 150 | °C |
| Storage temperature | T _{stg} | -45 to +150 | °C |

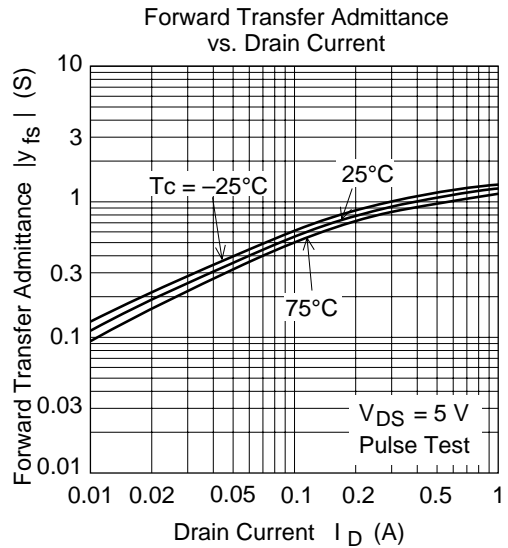
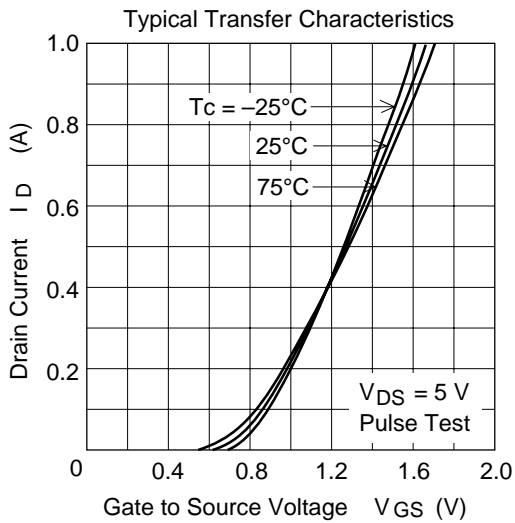
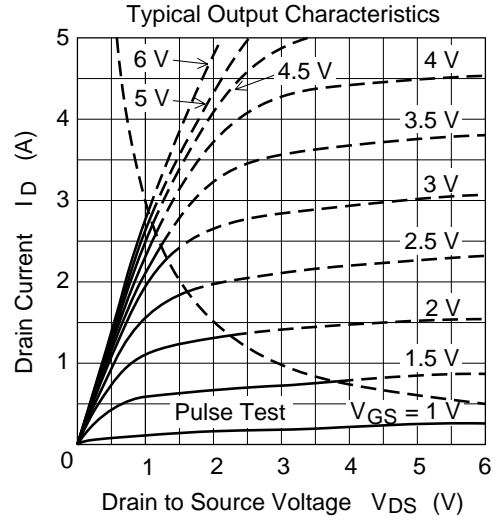
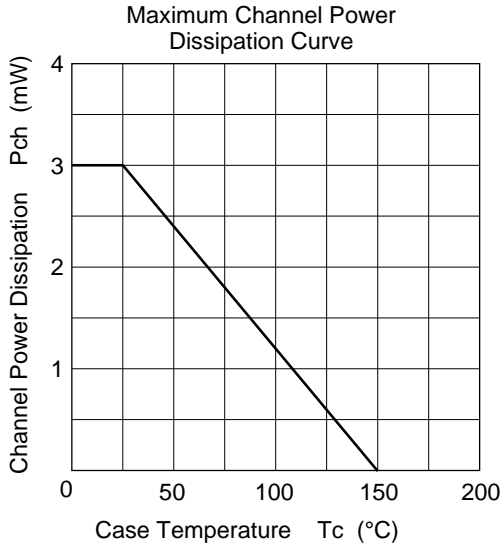
Note: 1. PW ≤ 10ms, duty cycle ≤ 50 %
 2. Value at Tc = 25°C

Electrical Characteristics (Ta = 25°C)

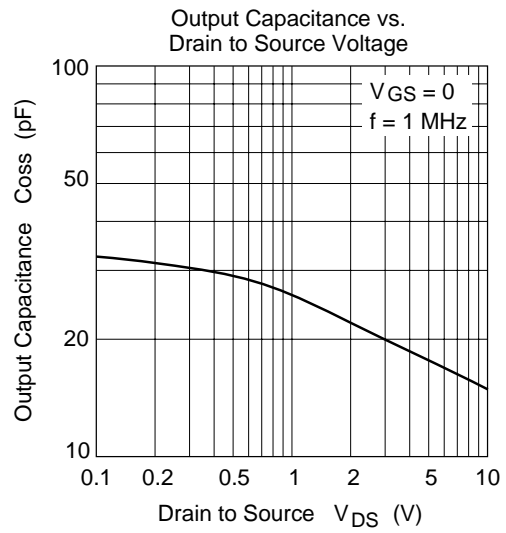
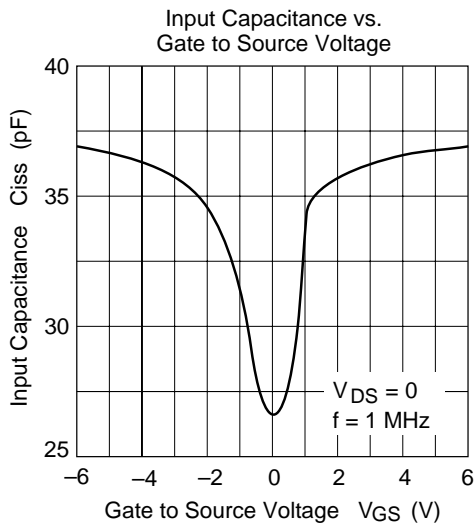
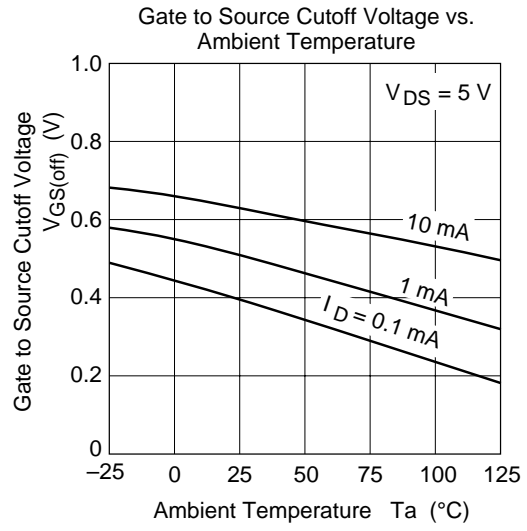
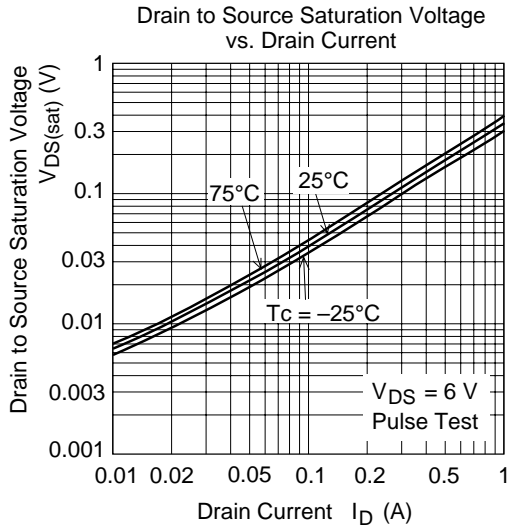
| Item | Symbol | Min | Typ | Max | Unit | Test Conditions |
|---------------------------------|----------------------|-----|-----|------|------|---|
| Zero gate voltage drain current | I _{DSS} | — | — | 10 | μA | V _{DS} = 10 V, V _{GS} = 0 |
| Gate to source leak current | I _{GSS} | — | — | ±5.0 | μA | V _{GS} = ±6V, V _{DS} = 0 |
| Gate to source cutoff voltage | V _{GS(off)} | 1.0 | — | 2.0 | V | I _D = 4mA, V _{DS} = 5V |
| Input capacitance | C _{iss} | — | 36 | — | pF | V _{GS} = 2V, V _{DS} = 0 f = 1MHz |
| Output capacitance | C _{oss} | — | 17 | — | pF | V _{DS} = 5, V _{GS} = 0 f = 1MHz |
| Output Power | P _{out} | 31 | — | — | dBm | V _{DS} = 4.7V f = 836.5MHz P _{in} = 23dBm |
| Drain Rational | η _D | 60 | — | — | % | V _{DS} = 4.7V f = 836.5MHz P _{in} = 23dBm |

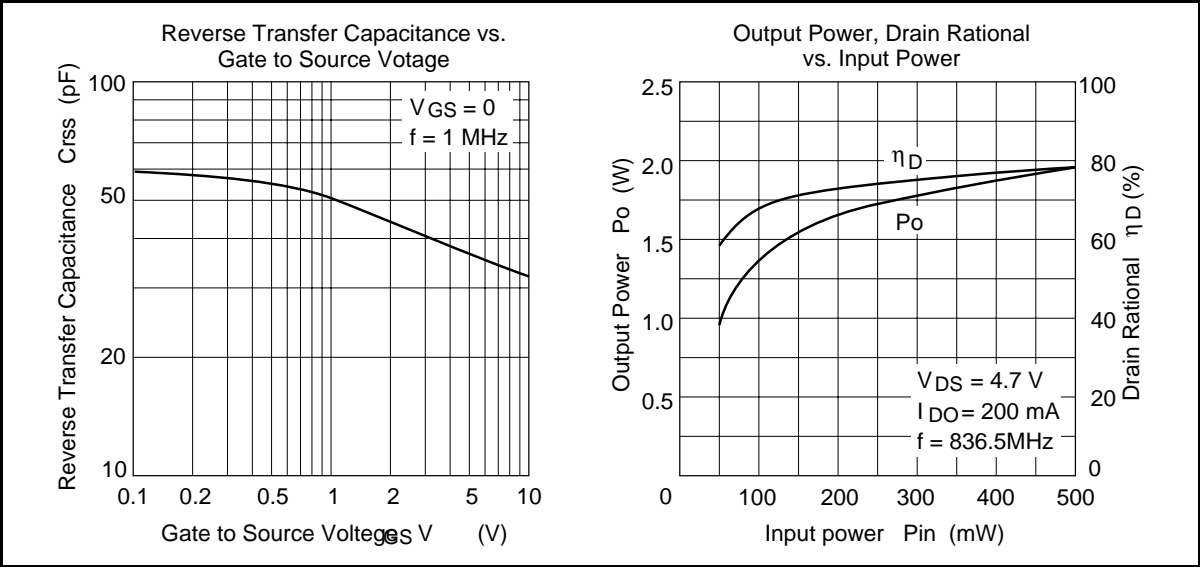
Note: 3. Marking is "CX".

Main Characteristics



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Package Dimentions

Unit: mm

