

2SK435

Silicon N-Channel Junction FET

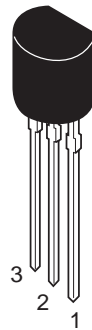
REJ03G0812-0200
(Previous ADE-208-1171)
Rev.2.00
Aug.10.2005

Application

Low frequency / High frequency amplifier

Outline

RENESAS Package code: PRSS0003DB-C
(Package name: TO-92 (2))



1. Drain
2. Source
3. Gate

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	V_{DS}	22	V
Gate to source voltage	V_{GSO}	-22	V
Drain current	I_D	100	mA
Gate current	I_G	10	mA
Channel power dissipation	P_{ch}	300	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

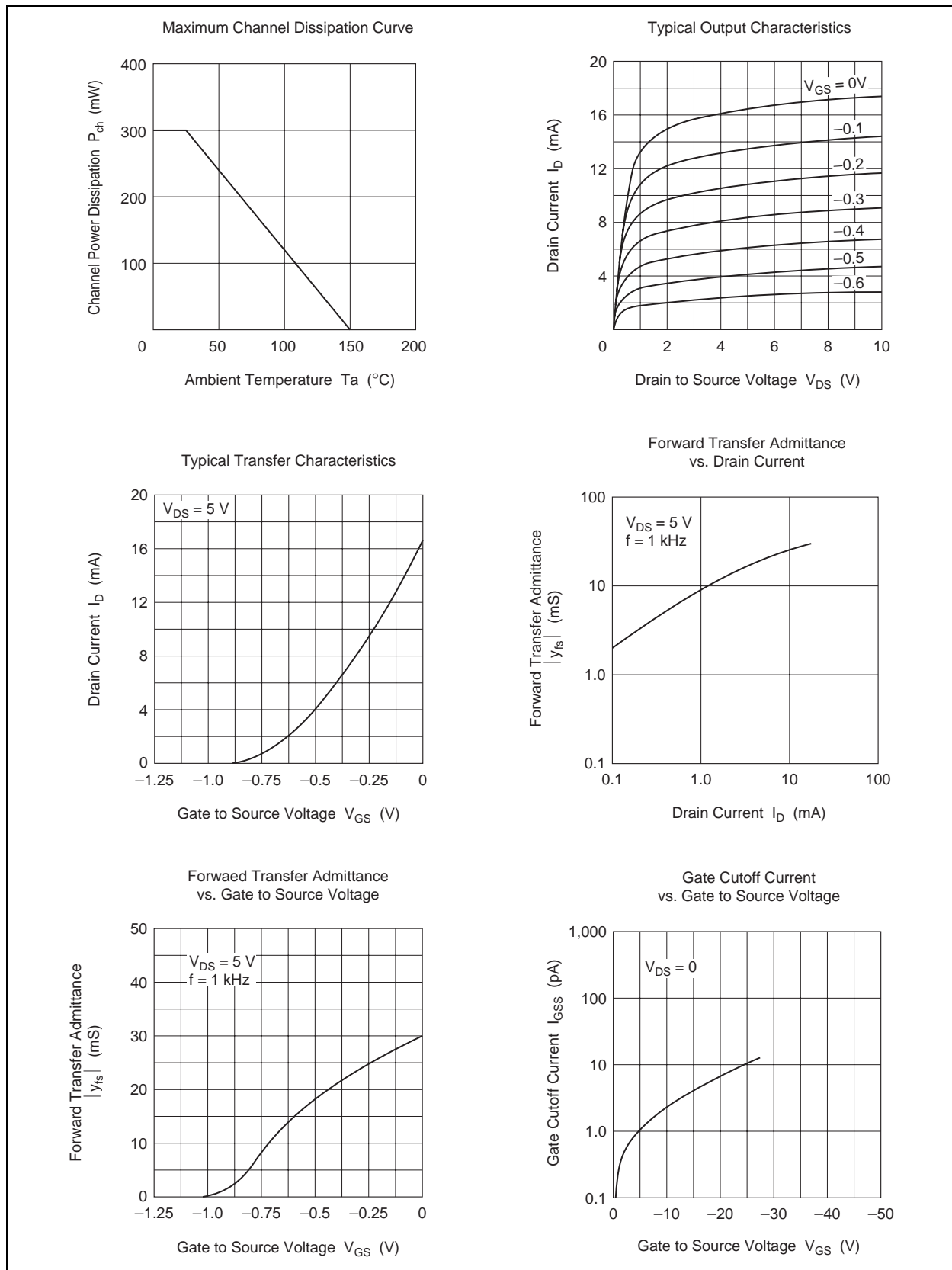
Electrical Characteristics

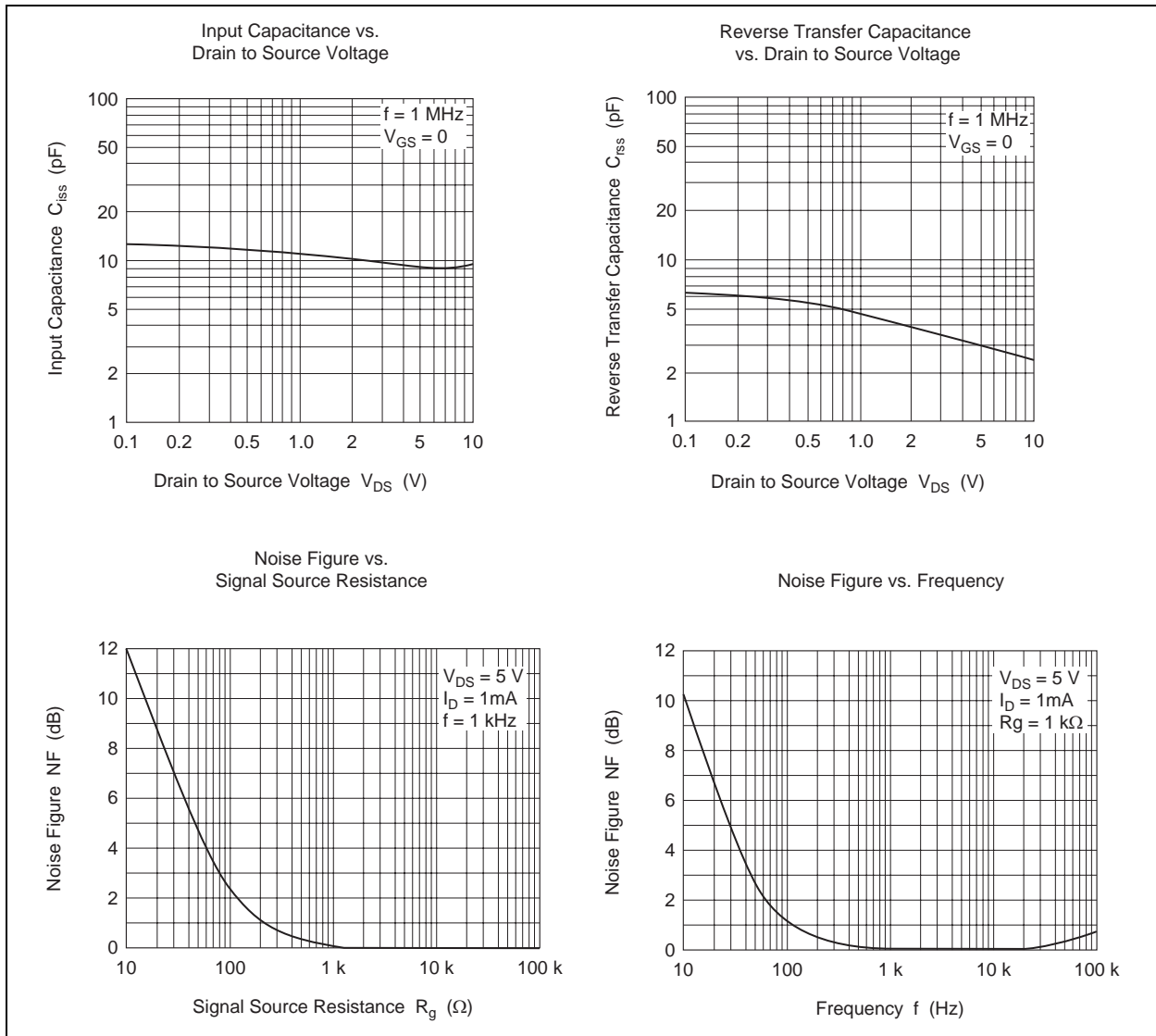
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Gate to source breakdown voltage	$V_{(BR)GSS}$	-22	—	—	V	$I_G = -10 \mu A, V_{DS} = 0$
Gate cutoff current	I_{GSS}	—	—	-10	nA	$V_{GS} = -15 V, V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	—	—	-2.5	V	$V_{DS} = 5 V, I_D = 10 \mu A$
Drain current	I_{DSS}^{*1}	12	—	30	mA	$V_{DS} = 5 V, V_{GS} = 0, \text{Pulse test}$
Forward transfer admittance	$ y_{fs} $	20	—	—	mS	$V_{DS} = 5 V, I_D = 10 mA, f = 1 kHz$
Input capacitance	C_{iss}	—	9.0	11.0	pF	$V_{DS} = 5 V, V_{GS} = 0, f = 1 MHz$
Reverse transfer capacitance	C_{rss}	—	2.8	4.0	pF	$V_{DS} = 5 V, V_{GS} = 0, f = 1 MHz$
Noise figure	NF	—	0.5	3.0	dB	$V_{DS} = 5 V, I_D = 1 mA, f = 1 kHz, R_g = 1 k\Omega$

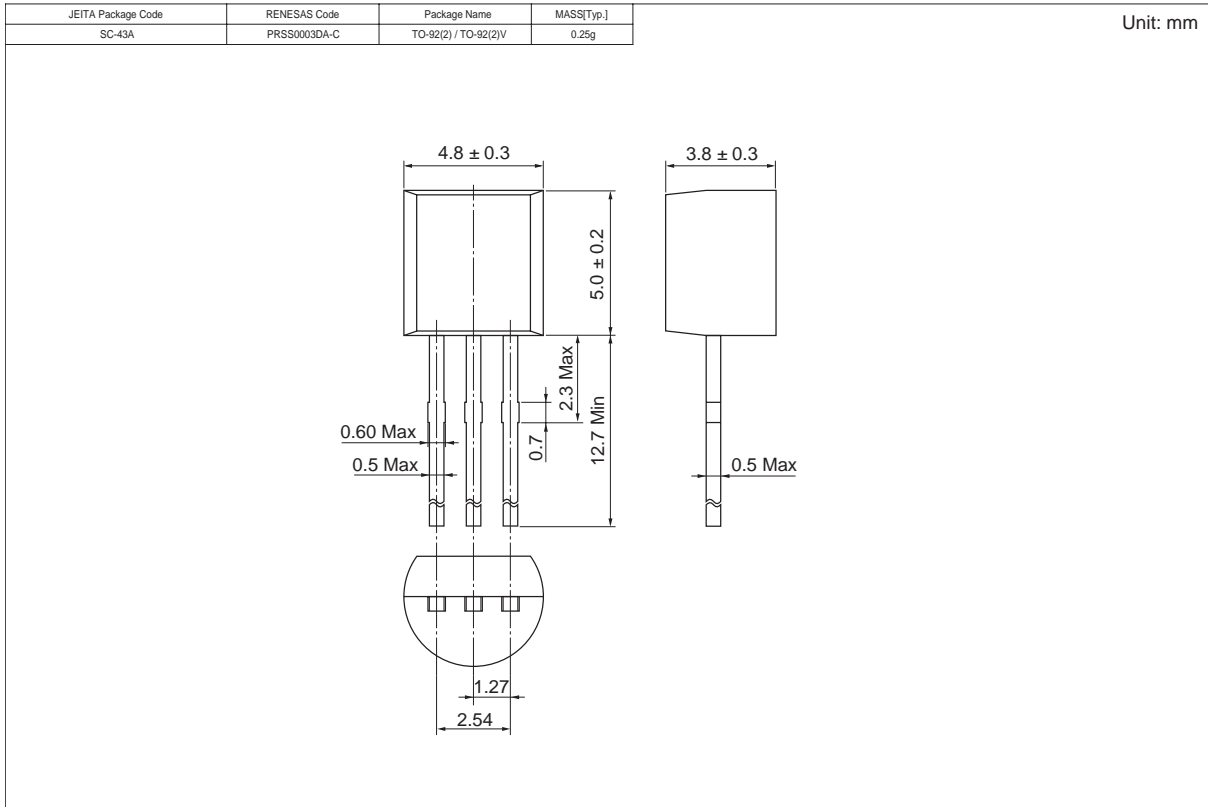
Note: 1. The 2SK435 is grouped by I_{DSS} as follows.

Grade	C	D
I_{DSS}	12 to 22	18 to 30





Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SK435CTZ	2500	Radial taping, Hold box
2SK435DTZ	2500	Radial taping, Hold box

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.

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RENESAS Technology America, Inc.

450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

RENESAS Technology Europe Limited

Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

RENESAS Technology Hong Kong Ltd.

7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2730-6071

RENESAS Technology Taiwan Co., Ltd.

10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

RENESAS Technology (Shanghai) Co., Ltd.

Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China
Tel: <86> (21) 6472-1001, Fax: <86> (21) 6415-2952

RENESAS Technology Singapore Pte. Ltd.

1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

RENESAS Technology Korea Co., Ltd.

Kukje Center Bldg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea
Tel: <82> 2-796-3115, Fax: <82> 2-796-2145

RENESAS Technology Malaysia Sdn. Bhd.

Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jalan Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: <603> 7955-9390, Fax: <603> 7955-9510