

2SK435

Silicon N-Channel Junction FET

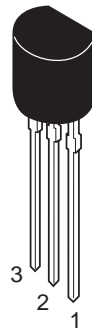
REJ03G0812-0200
(Previous ADE-208-1171)
Rev.2.00
Aug.10.2005

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

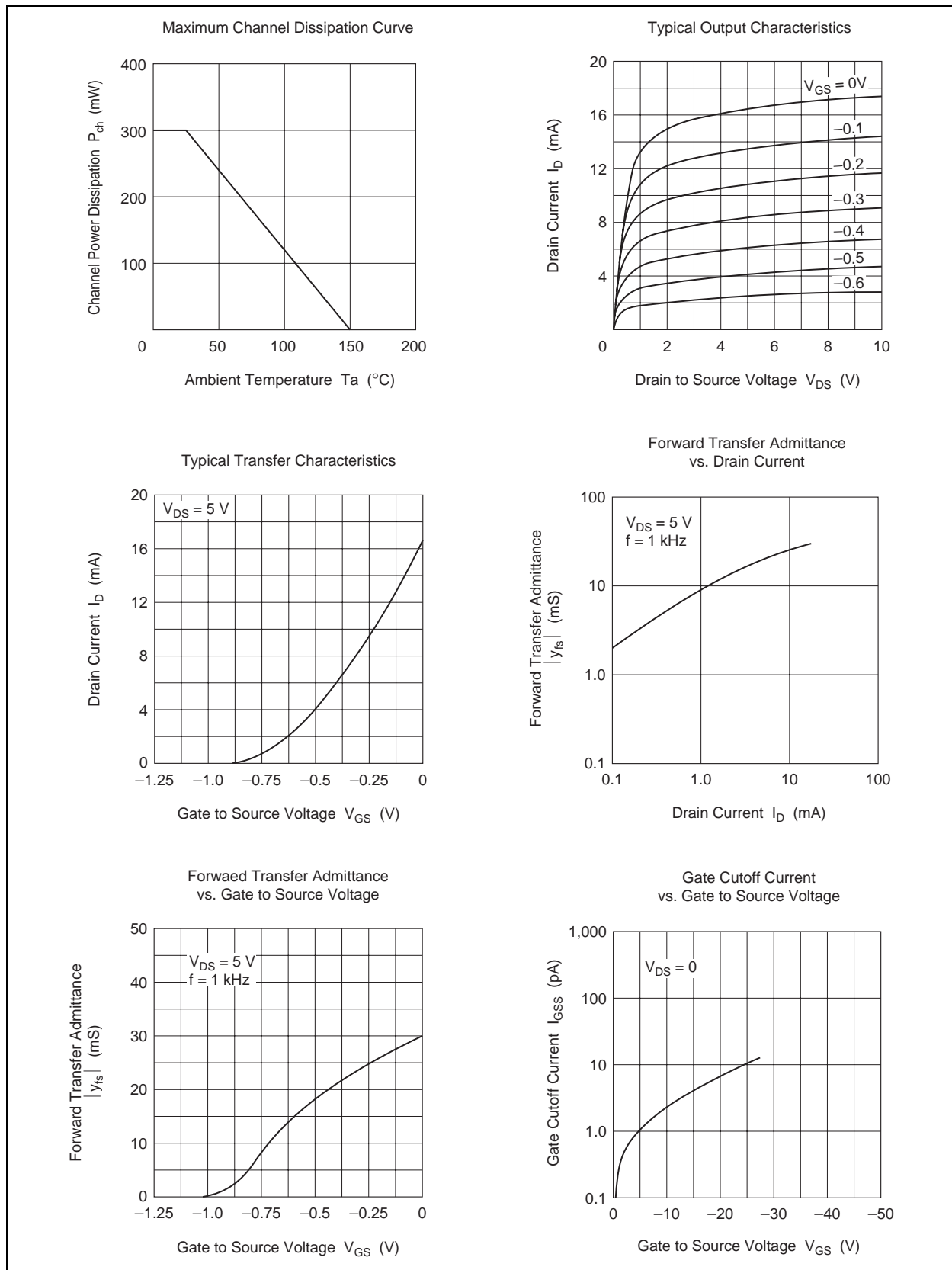
Electrical Characteristics

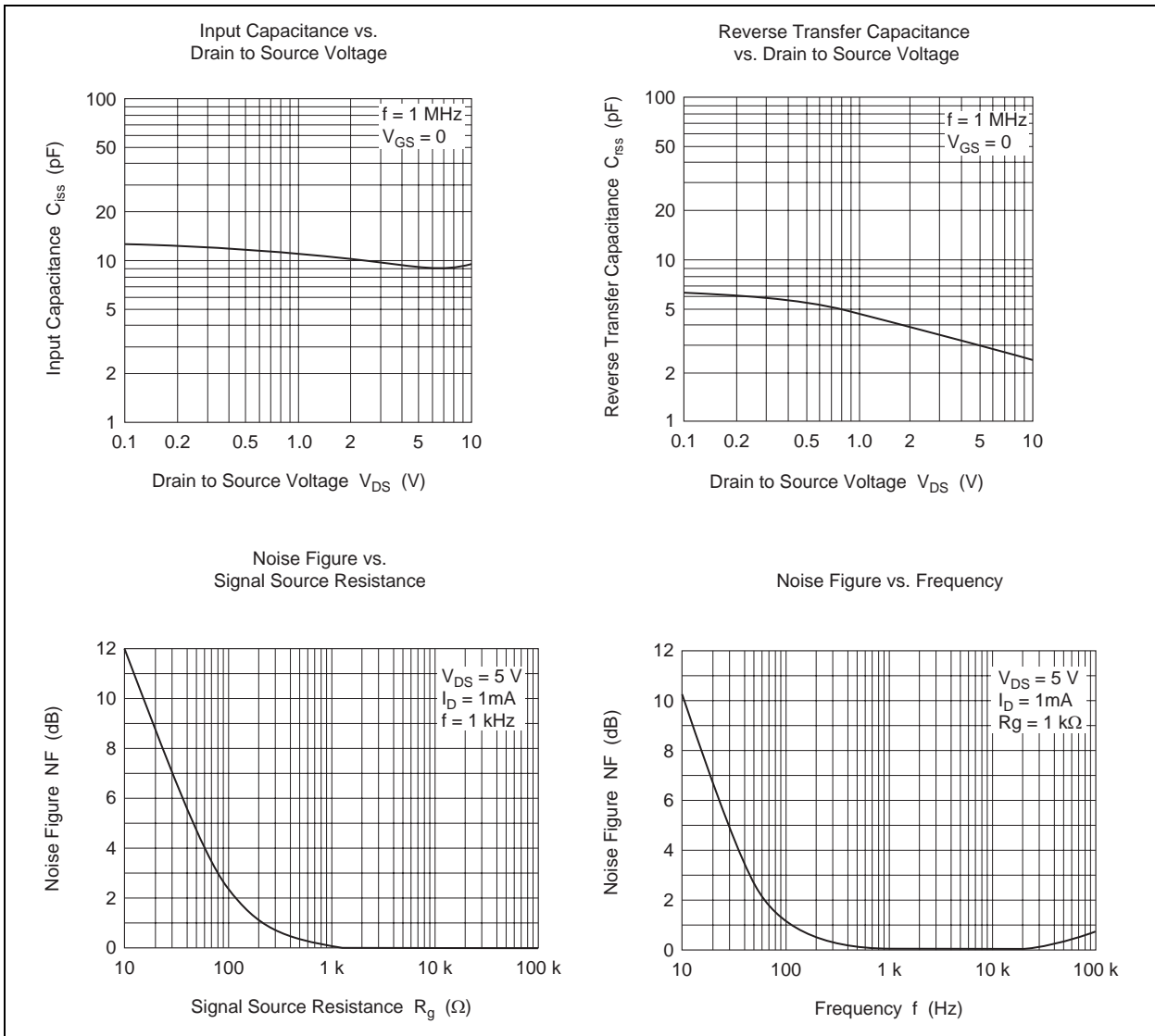
(Ta = 25°C)

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	$V_{DS} = 5 V, I_D = 10 \text{ mA}, f = 1 \text{ kHz}$
Input capacitance	C_{iss}	—	9.0	11.0	pF	$V_{DS} = 5 V, V_{GS} = 0, f = 1 \text{ MHz}$
Reverse transfer capacitance	C_{rss}	—	2.8	4.0	pF	$V_{DS} = 5 V, V_{GS} = 0, f = 1 \text{ MHz}$
Noise figure	NF	—	0.5	3.0	dB	$V_{DS} = 5 V, I_D = 1 \text{ mA}, f = 1 \text{ kHz}, R_g = 1 \text{ k}\Omega$

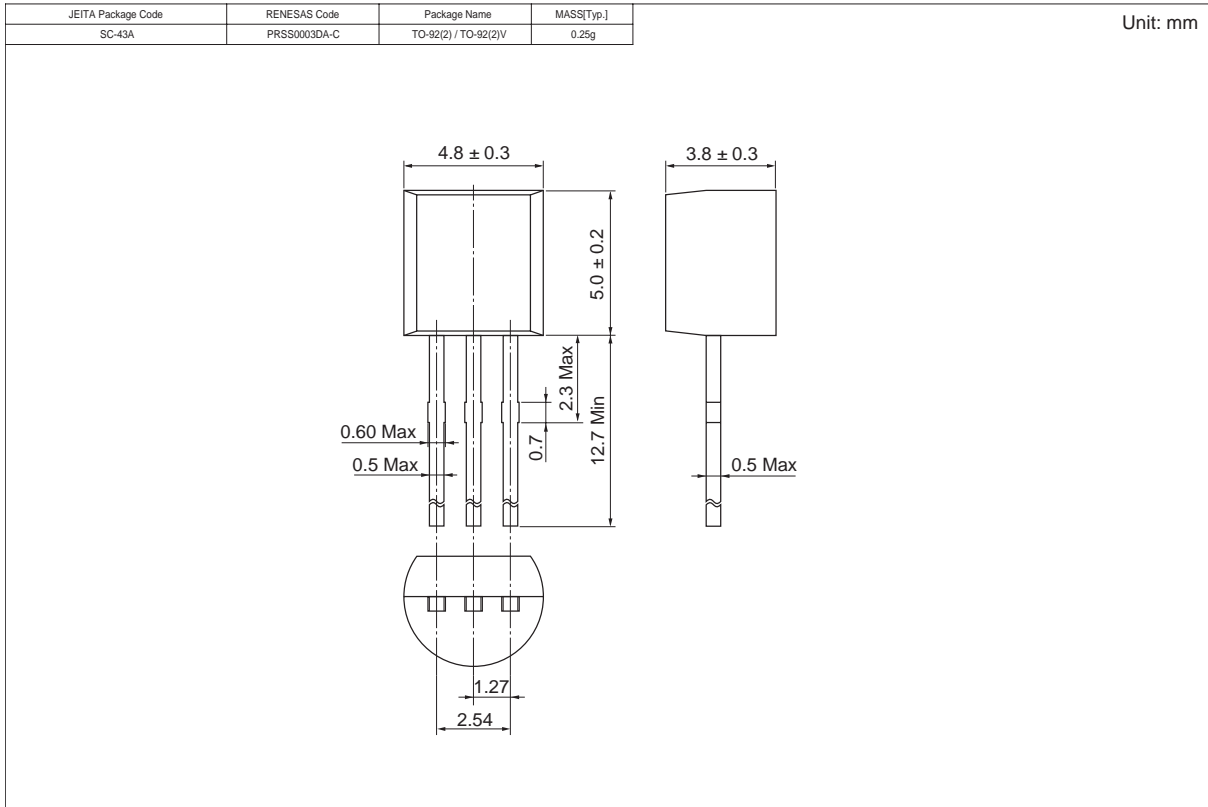
Note: 1. The 2SK435 is grouped by I_{DSS} as follows.

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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