

2SK1215

Silicon N-Channel MOS FET

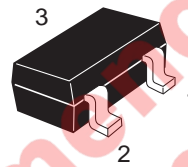
REJ03G0813-0200
(Previous ADE-208-1176)
Rev.2.00
Aug.10.2005

Application

VHF amplifier

Outline

RENESAS Package code: PTSP0003ZA-A
(Package name: CMPAK[®])



1. Gate
2. Drain
3. Source

*CMPAK is a trademark of Renesas Technology Corp.

Not recommended
for new design

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	V_{DSX}^{*1}	20	V
Gate to source voltage	V_{GSS}	±5	V
Drain current	I_D	30	mA
Gate current	I_G	±1	mA
Channel power dissipation	Pch	100	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-55 to +150	°C

Note: 1. $V_{GS} = -4$ V

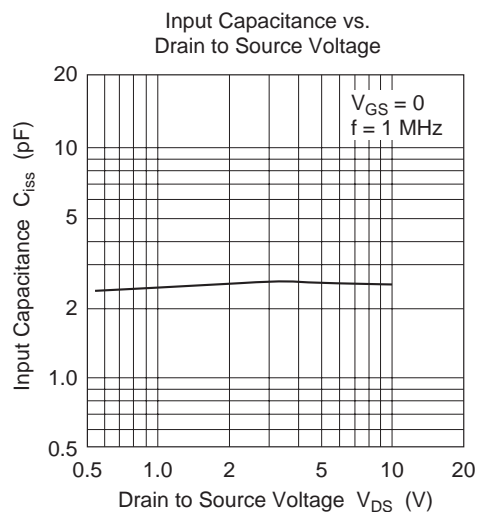
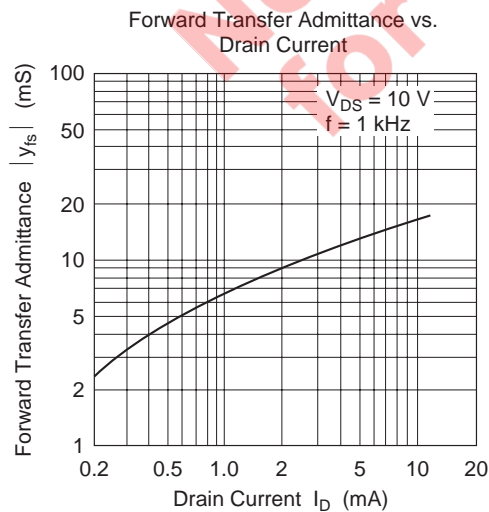
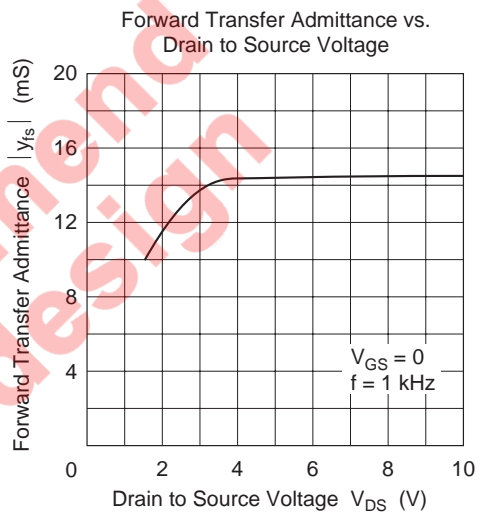
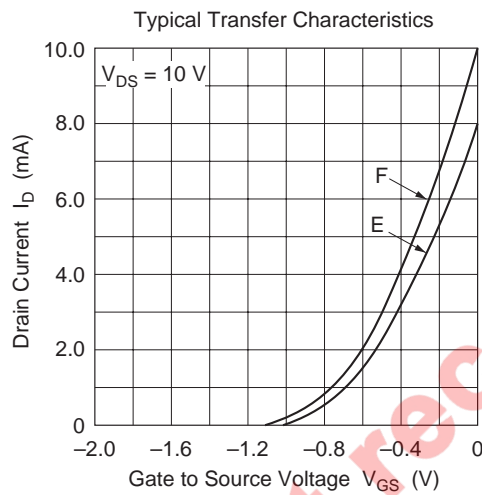
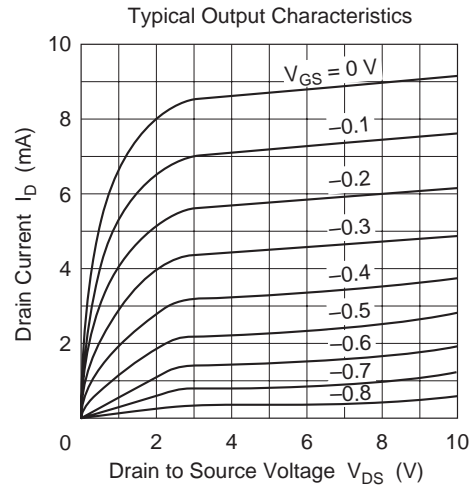
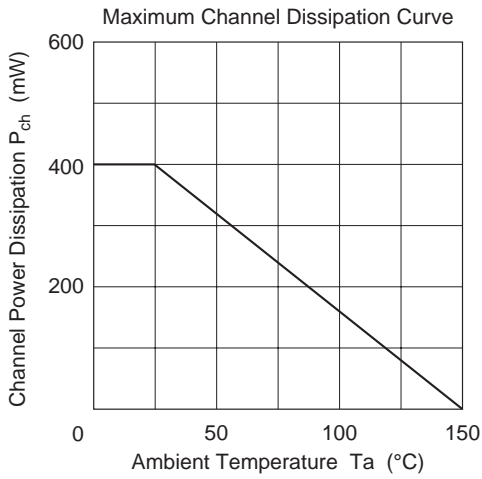
Electrical Characteristics

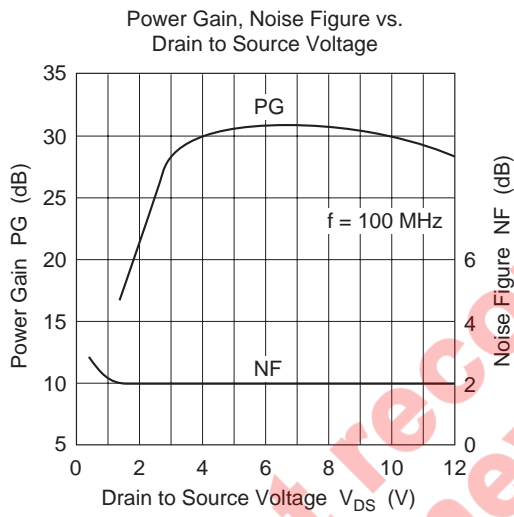
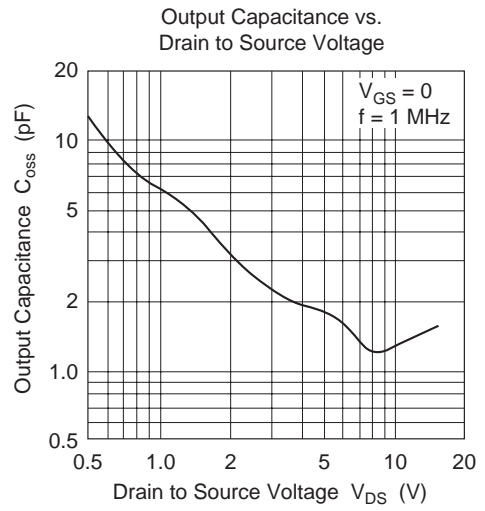
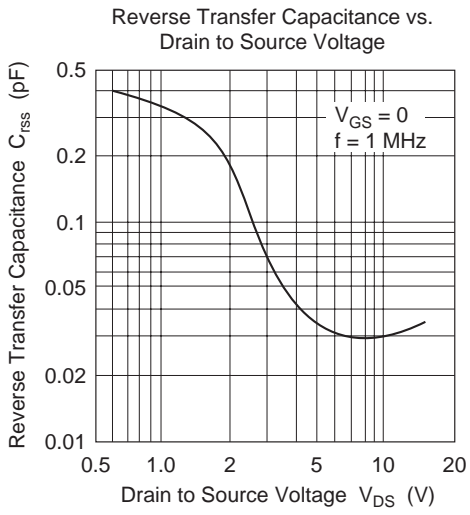
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Drain to source breakdown voltage	$V_{(BR)DSX}$	20	—	—	V	$I_D = 100 \mu A, V_{GS} = -4$ V
Gate cutoff current	I_{GSS}	—	—	±20	nA	$V_{GS} = \pm 5$ V, $V_{DS} = 0$
Drain current	I_{DSS}^{*1}	6	—	12	mA	$V_{DS} = 10$ V, $V_{GS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	0	—	-2.0	V	$V_{DS} = 10$ V, $I_D = 10 \mu A$
Forward transfer admittance	$ y_{fs} $	8	14	—	mS	$V_{DS} = 10$ V, $V_{GS} = 0$, $f = 1$ kHz
Input capacitance	C_{iss}	—	2.5	—	pF	$V_{DS} = 10$ V, $V_{GS} = 0$, $f = 1$ MHz
Output capacitance	C_{oss}	—	1.6	—	pF	
Reverse transfer capacitance	C_{rss}	—	0.03	—	pF	
Power gain	PG	24	—	—	dB	$V_{DS} = 10$ V, $V_{GS} = 0$, $f = 100$ MHz
Noise figure	NF	—	—	3	dB	

Note: 1. The 2SK1215 is grouped by I_{DSS} as follows.

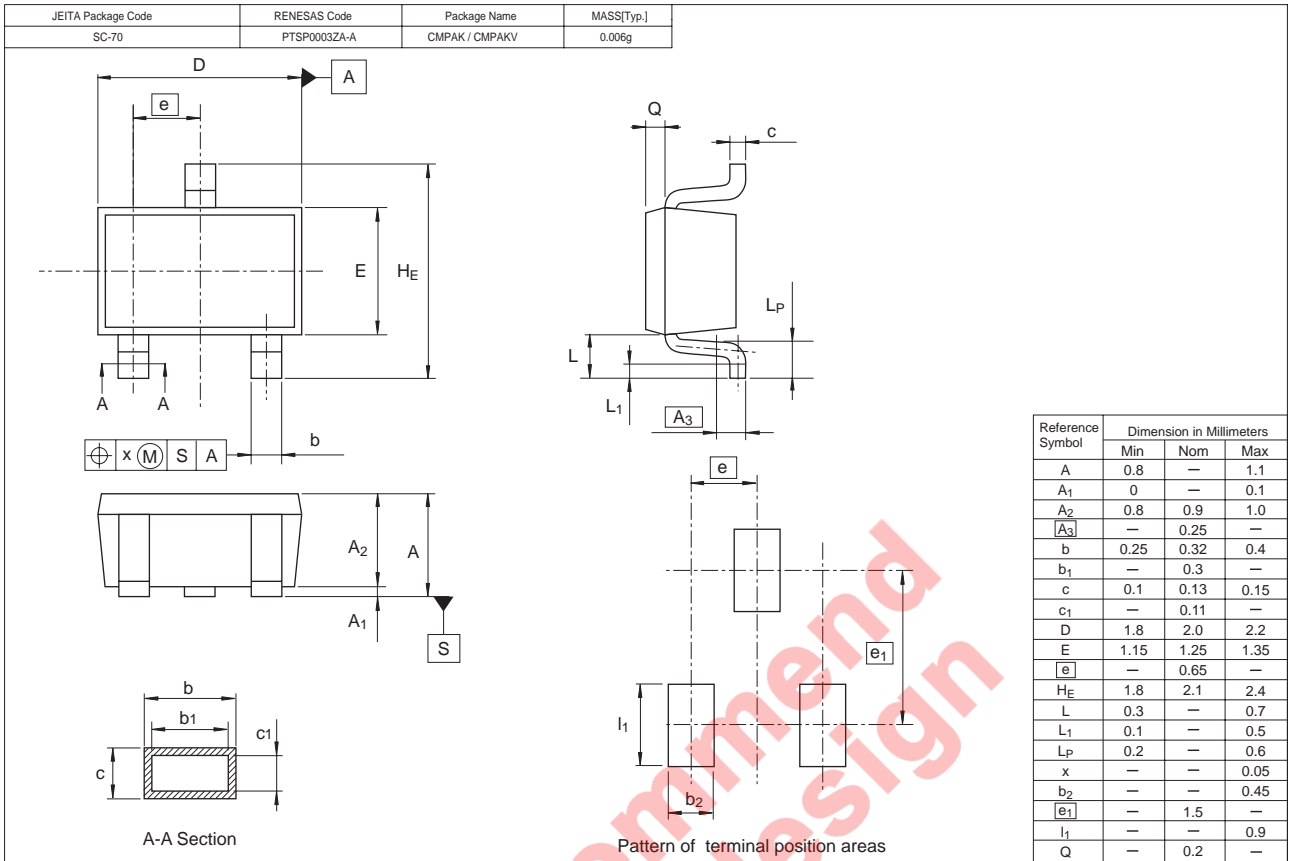
Grade	E	F
Mark	IGE	IGF
I_{DSS}	6 to 10	8 to 12





Not recommended for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SK1215IGETL	3000	φ 178 mm Reel, 8 mm Emboss Taping
2SK1215IGFTL	3000	φ 178 mm Reel, 8 mm Emboss Taping

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