To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

Cautions

Keep safety first in your circuit designs!

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   Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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2SK1215

Silicon N-Channel MOS FET

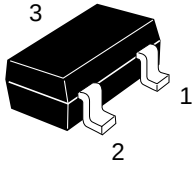
ADE-208-1176 (Z)
1st. Edition
Mar. 2001

Application

VHF amplifier

Outline

CMPAK



1. Gate
2. Drain
3. Source

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 µA, V_{GS} = –4 V
Gate cutoff current	I_{GSS}	—	—	±20	nA	V_{GS} = ±5 V, V_{DS} = 0
Drain current	I_{DSS}*[1]	4	—	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 µA
Forward transfer admittance	$\|y_{fs}\|$	8	14	—	mS	V_{DS} = 10 V, V_{GS} = 0, f = 1 kHz
Input capacitance	Ciss	—	2.5	—	pF	V_{DS} = 10 V, V_{GS} = 0, f = 1 MHz
Output capacitance	Coss	—	1.6	—	pF	
Reverse transfer capacitance	Crss	—	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.

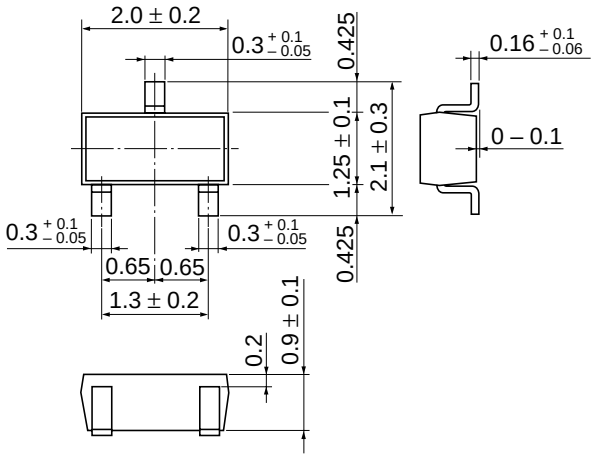
Grade	D	E	F
Mark	IGD	IGE	IGF
I_{DSS}	4 to 8	6 to 10	8 to 12

See characteristic curves of 2SK359.

Package Dimensions

As of January, 2001

Unit: mm



Hitachi Code	CMPAK
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.006 g

Cautions

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