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# 2SK217

Silicon N-Channel Junction FET

# HITACHI

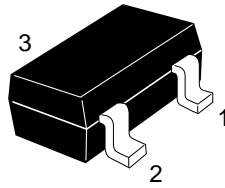
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## Application

VHF amplifier

## Outline

MPAK



1. Gate
2. Drain
3. Source

**Absolute Maximum Ratings** (Ta = 25°C)

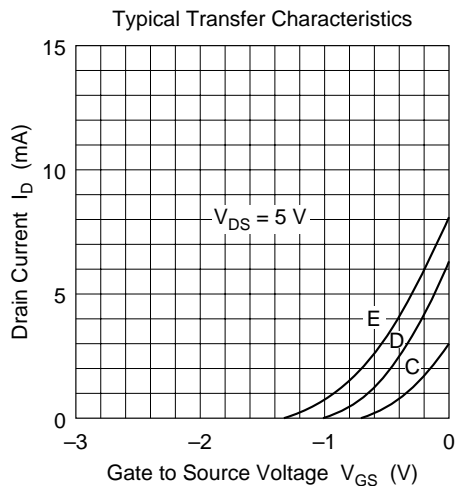
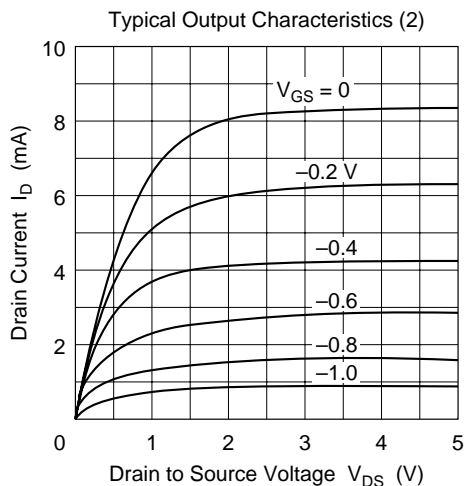
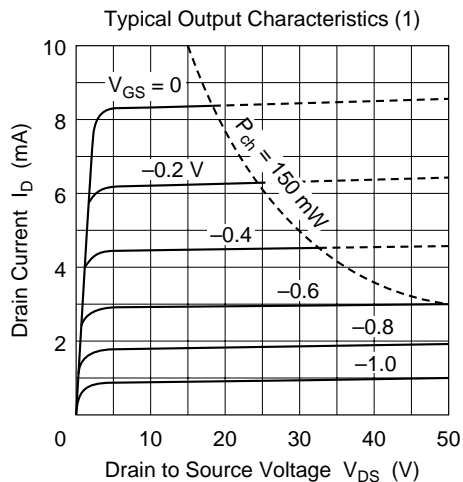
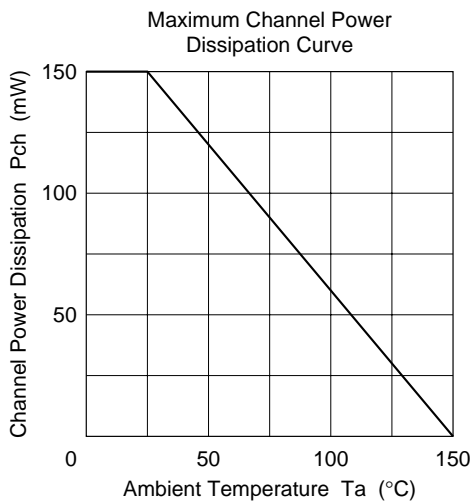
Item	Symbol	Ratings	Unit
Gate to drain current	$V_{GDO}$	-30	V
Drain current	$I_D$	20	mA
Gate current	$I_G$	10	mA
Channel power dissipation	Pch	150	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-55 to +150	°C

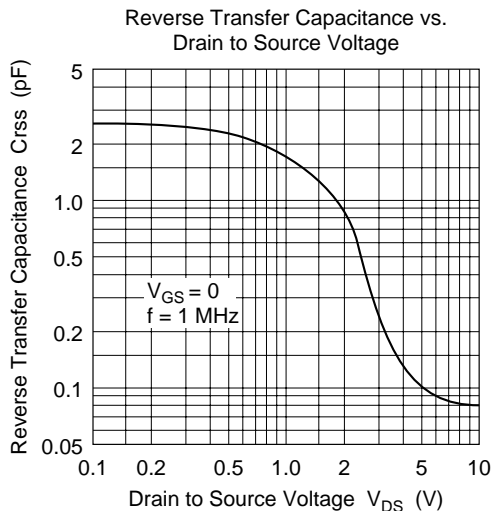
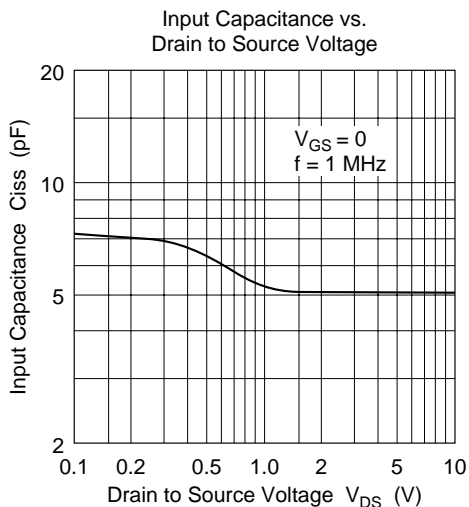
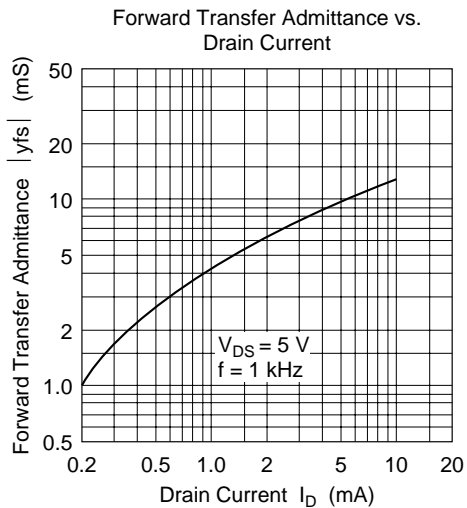
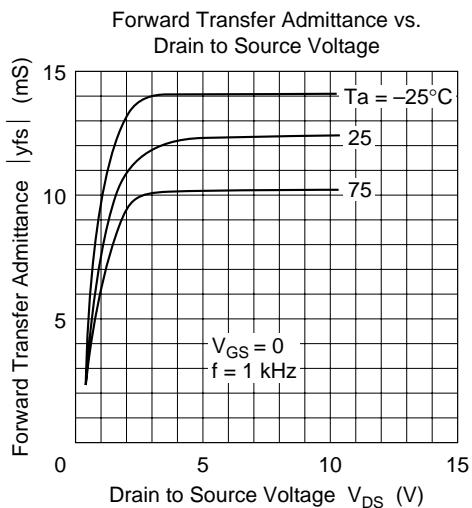
**Electrical Characteristics** (Ta = 25°C)

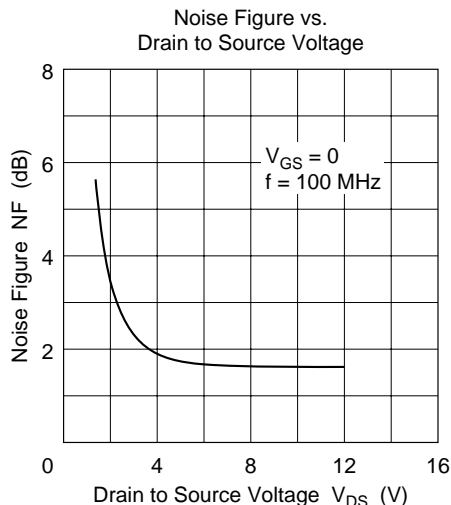
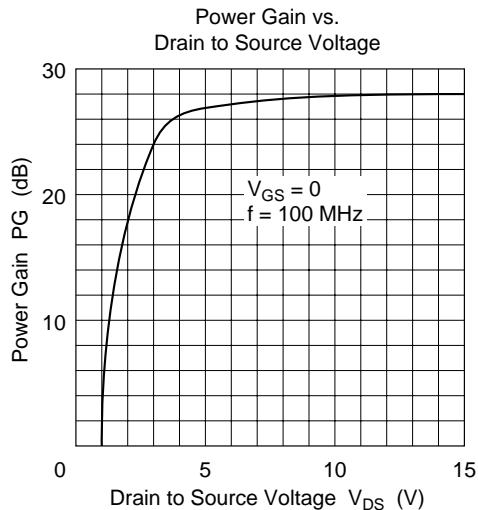
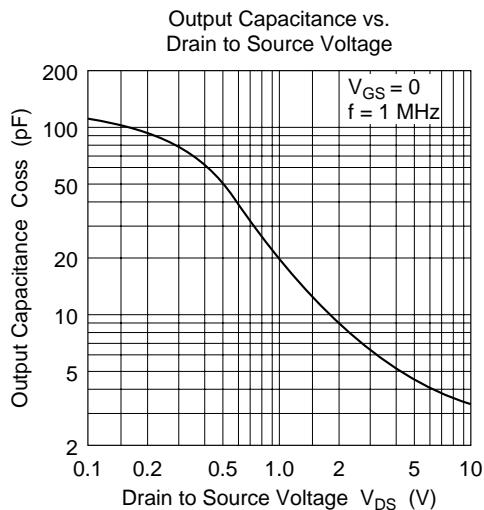
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Gate to drain breakdown voltage	$V_{(BR)GDO}$	-30	—	—	V	$I_G = -100 \mu A$
Gate cutoff current	$I_{GSS}$	—	—	-10	nA	$V_{GS} = -0.5 V, V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	—	—	-2.5	V	$V_{DS} = 5 V, I_D = 10 \mu A$
Drain current	$I_{DSS}^{*1}$	2.5	—	12	mA	$V_{DS} = 5 V, V_{GS} = 0$
Forward transfer admittance	$ y_{fs} $	—	8.0	—	mS	$V_{DS} = 5 V, V_{GS} = 0, f = 1 kHz$
Reverse transfer capacitance	Crss	—	0.1	—	pF	$V_{DS} = 5 V, V_{GS} = 0, f = 1 MHz$

Note: 1. The 2SK217 is grouped by  $I_{DSS}$  as follows.

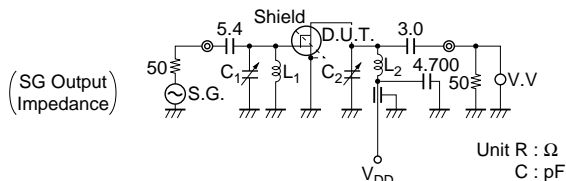
Grade	C	D	E
Mark	ZC	ZD	ZE
$I_{DSS}$	2.5 to 5	4 to 8	6 to 12



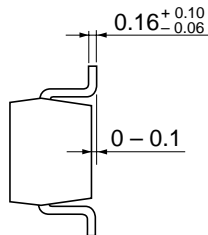
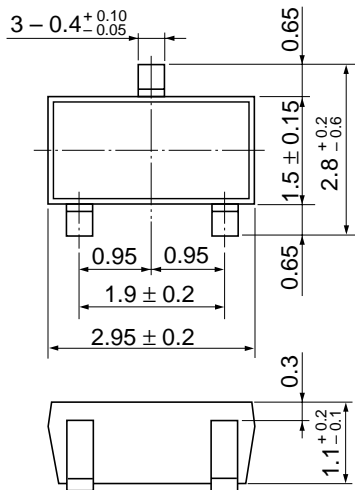




Power Gain and Noise Figure Test Circuit



- $C_1, C_2$ : 0 to 30pF Variable Air
- $L_1$ : 3.5 T  $\phi 1$  mm Copper Ribbon, Tin plated 10 mm Inside dia.
- $L_2$ : 4.5 T  $\phi 1$  mm Copper Ribbon, Tin plated 10 mm Inside dia.



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.011 g

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# HITACHI

## Hitachi, Ltd.

Semiconductor & Integrated Circuits.  
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan  
Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

URL      North America      : <http://semiconductor.hitachi.com/>  
             Europe                 : <http://www.hitachi-eu.com/hel/ecg>  
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## For further information write to:

Hitachi Semiconductor  
(America) Inc.  
179 East Tasman Drive,  
San Jose, CA 95134  
Tel: <1> (408) 433-1990  
Fax: <1> (408) 433-0223

Hitachi Europe GmbH  
Electronic components Group  
Dornacher Straße 3  
D-85622 Feldkirchen, Munich  
Germany  
Tel: <49> (89) 9 9180-0  
Fax: <49> (89) 9 29 30 00

Hitachi Europe Ltd.  
Electronic Components Group.  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 8YA, United Kingdom  
Tel: <44> (1628) 585000  
Fax: <44> (1628) 778322

Hitachi Asia Pte. Ltd.  
16 Collyer Quay #20-00  
Hitachi Tower  
Singapore 049318  
Tel: 535-2100  
Fax: 535-1533

Hitachi Asia Ltd.  
Taipei Branch Office  
3F, Hung Kuo Building, No.167,  
Tun-Hwa North Road, Taipei (105)  
Tel: <886> (2) 2718-3666  
Fax: <886> (2) 2718-8180

Hitachi Asia (Hong Kong) Ltd.  
Group III (Electronic Components)  
7/F., North Tower, World Finance Centre,  
Harbour City, Canton Road, Tsim Sha Tsui,  
Kowloon, Hong Kong  
Tel: <852> (2) 735 9218  
Fax: <852> (2) 730 0281  
Telex: 40815 HITEC HX

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