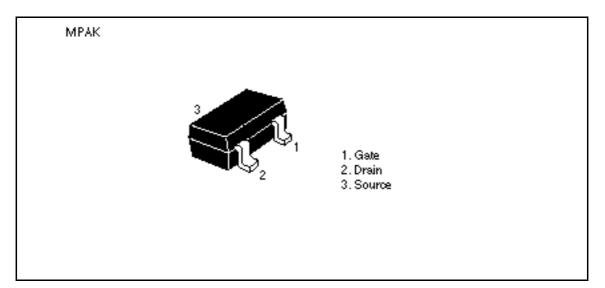
Silicon N-Channel Junction FET

HITACHI

Application

VHF amplifier

Outline





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 ($Ta = 25^{\circ}C$)

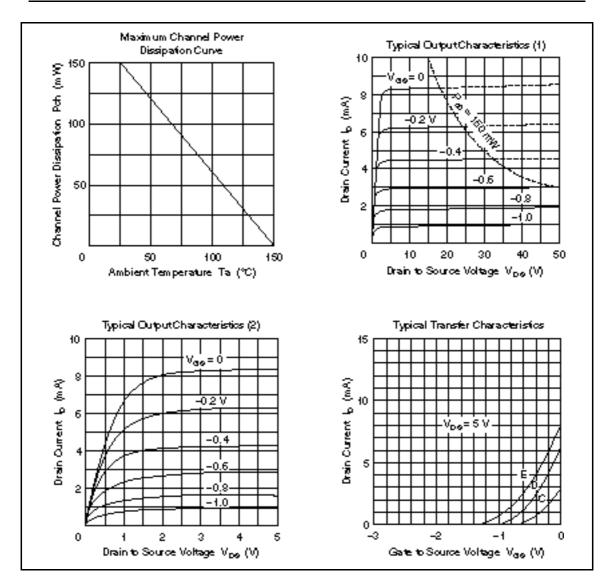
2.5 to 5

 \mathbf{I}_{DSS}

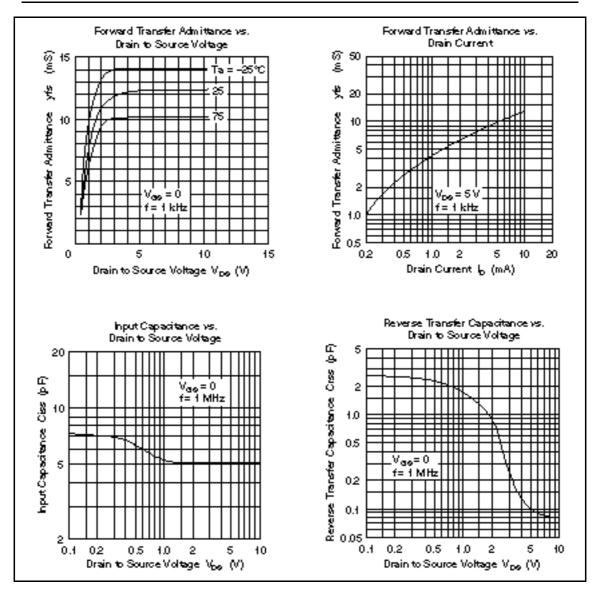
4 to 8

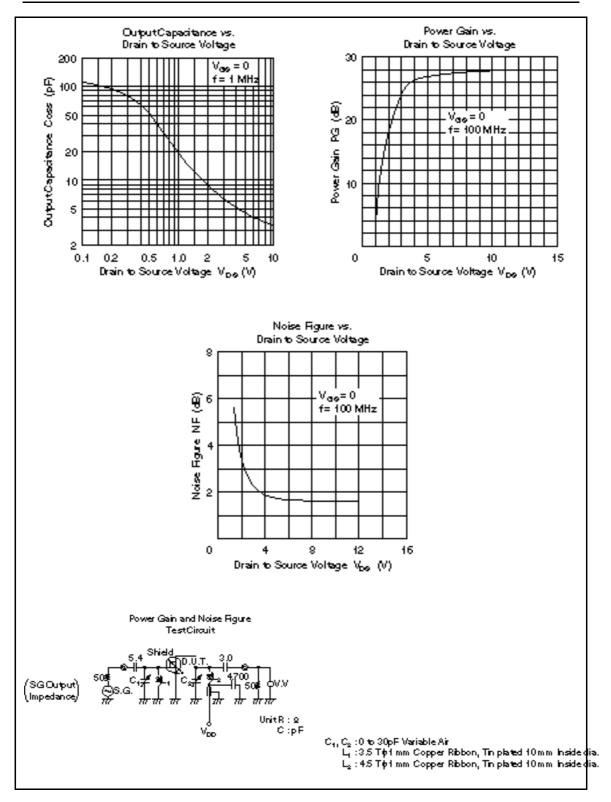
Item		Symbol	Min	Тур	Max	Unit	Test conditions	
Gate to drain breakdown voltage		$V_{(BR)GDO}$	-30	_	_	V	Ι _G = -100 μΑ	
Gate cutoff current		I _{GSS}	_	_	-10	nA	$V_{GS} = -0.5 V, V_{DS} = 0$	
Gate to so	ource cutoff vo	oltage	$V_{\text{GS(off)}}$	_	_	-2.5	V	V_{DS} = 5 V, I_{D} = 10 μ A
Drain curre	ent		I _{DSS} ^{*1}	2.5	_	12	mA	$V_{\rm DS} = 5 V, V_{\rm GS} = 0$
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	С	D		Е				
Mark	ZC	Z	D	ZE				

6 to 12



HITACHI





HITACHI

When using this document, keep the following in mind:

- 1. This document may, wholly or partially, be subject to change without notice.
- 2. All rights are reserved: No one is permitted to reproduce or duplicate, in any form, the whole or part of this document without Hitachi's permission.
- 3. Hitachi will not be held responsible for any damage to the user that may result from accidents or any other reasons during operation of the user's unit according to this document.
- 4. Circuitry and other examples described herein are meant merely to indicate the characteristics and performance of Hitachi's semiconductor products. Hitachi assumes no responsibility for any intellectual property claims or other problems that may result from applications based on the examples described herein.
- 5. No license is granted by implication or otherwise under any patents or other rights of any third party or Hitachi, Ltd.
- 6. MEDICAL APPLICATIONS: Hitachi's products are not authorized for use in MEDICAL APPLICATIONS without the written consent of the appropriate officer of Hitachi's sales company. Such use includes, but is not limited to, use in life support systems. Buyers of Hitachi's products are requested to notify the relevant Hitachi sales offices when planning to use the products in MEDICAL APPLICATIONS.

HITACHI

Hitachi, Ltd. Semiconductor & IC DV. Nepon Bidg, 2-5-2, Ohte-mach, Chiyoda-ku, Tokyo 100, Japan Tet Tokyo (03, 3270-2111 Fax (03, 3270-5109

For Author in forms Ion write to : Hischi America, Ud Semiconductor & IC DW. 2000 Sierre Point Pertwey Briebene, CA. 94005-4835 U S.Å Tet 415-583-8300 Fax: 415-583-4207

Hitschi Burope GmbH Bedronic Components Group Cartinertel Burope Danscher Streiße 3 D-85522 Fieldkirchen Minchen Tet 083-9 94 80-0 Fex 083-9 29 30 00 Hitschi Europe Ltd. Bectronic Components Div. Northern Burge Hesdguerters Whitsbrock Ferk Lower Cook hem Roed Neidenhesd Berkshire SL6SYA United Kingdom Tet 0628-355000 Fex 0628-778222 Hitschi Asia Pte. Ltd 45 Collyer Quey \$20-00 Hitschi Tower Singspore 0404 Tet 535-2400 Fex: 535-4533

Hitschi Asia (Hong Kong) Ltd. Unit 705, North Towar, World Finance Cantre, Herbour City, Carton Road Taim Sha Tau, Kowloon Hang Kong Tet 27:352218 Fax: 27:356074

HITACHI