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# 2SK217

Silicon N-Channel Junction FET

# HITACHI

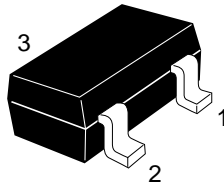
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## Application

VHF amplifier

## Outline

MPAK



1. Gate
2. Drain
3. Source

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

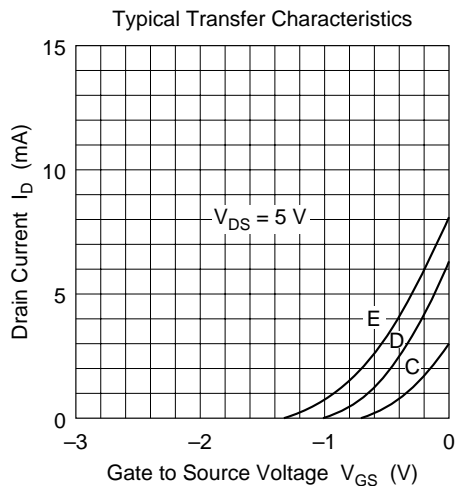
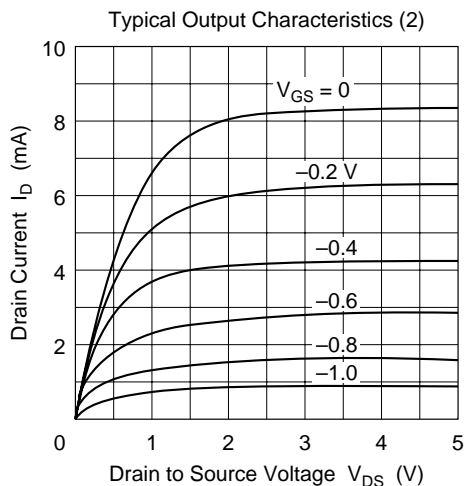
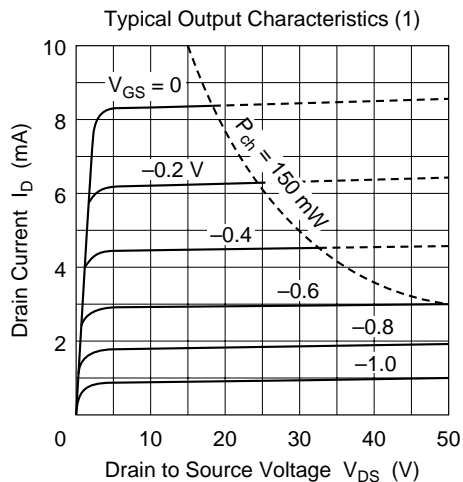
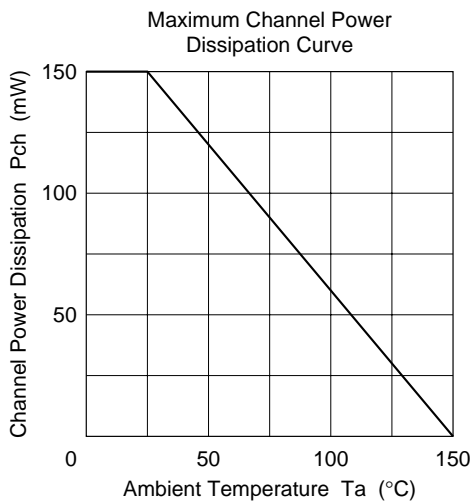
Item	Symbol	Ratings	Unit
Gate to drain current	$V_{GDO}$	-30	V
Drain current	$I_D$	20	mA
Gate current	$I_G$	10	mA
Channel power dissipation	Pch	150	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-55 to +150	°C

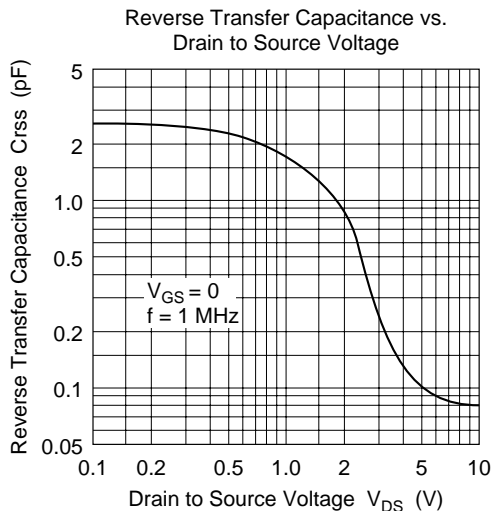
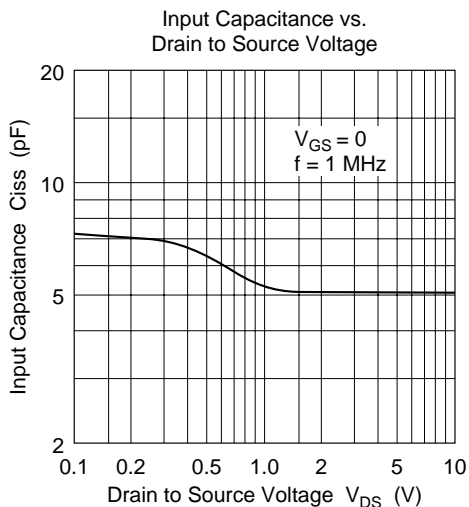
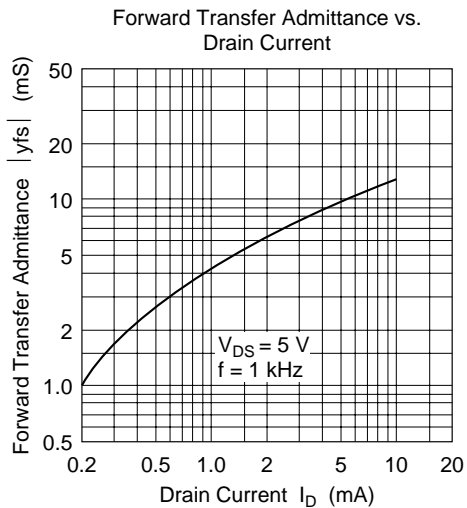
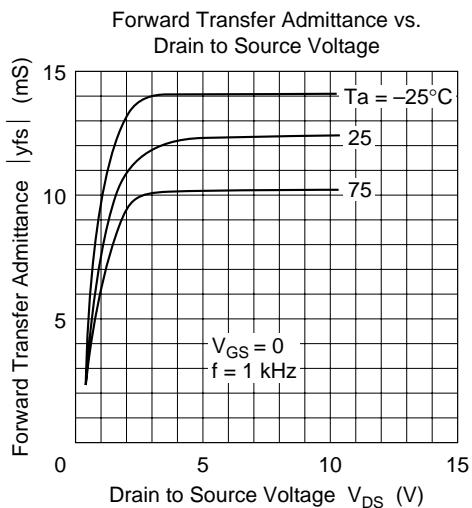
**Electrical Characteristics** (Ta = 25°C)

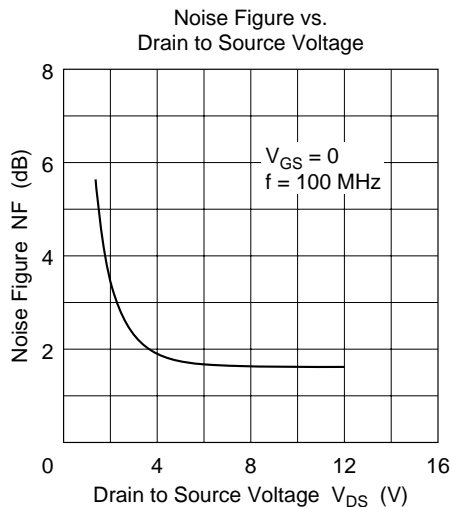
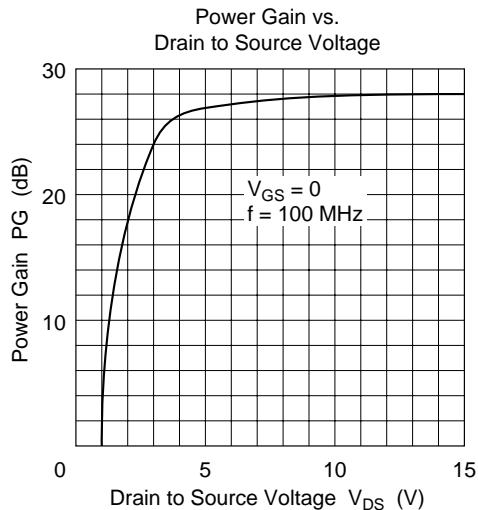
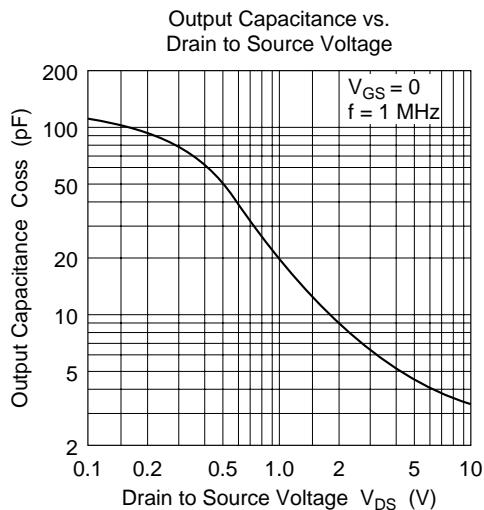
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Gate to drain breakdown voltage	$V_{(BR)GDO}$	-30	—	—	V	$I_G = -100 \mu A$
Gate cutoff current	$I_{GSS}$	—	—	-10	nA	$V_{GS} = -0.5 V, V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	—	—	-2.5	V	$V_{DS} = 5 V, I_D = 10 \mu A$
Drain current	$I_{DSS}^{*1}$	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.

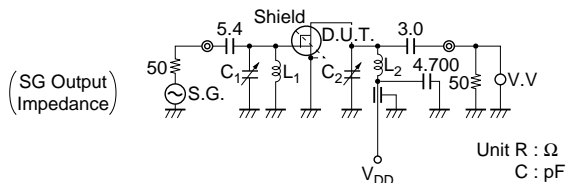
Grade	C	D	E
Mark	ZC	ZD	ZE
$I_{DSS}$	2.5 to 5	4 to 8	6 to 12



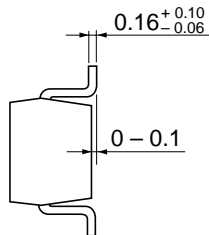
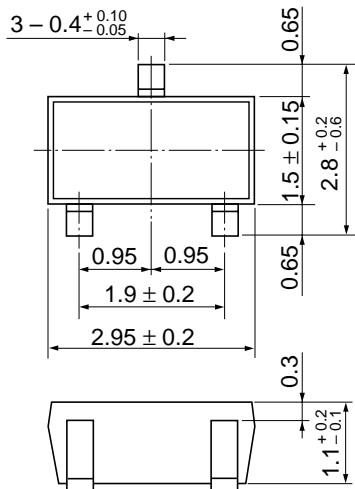




Power Gain and Noise Figure Test Circuit



- $C_1, C_2$  : 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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