
2SK217

Silicon N-Channel Junction FET

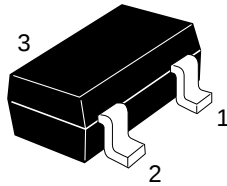
HITACHI

Application

VHF amplifier

Outline

MPAK



- 1. Gate
- 2. Drain
- 3. Source

Absolute Maximum Ratings (Ta = 25°C)

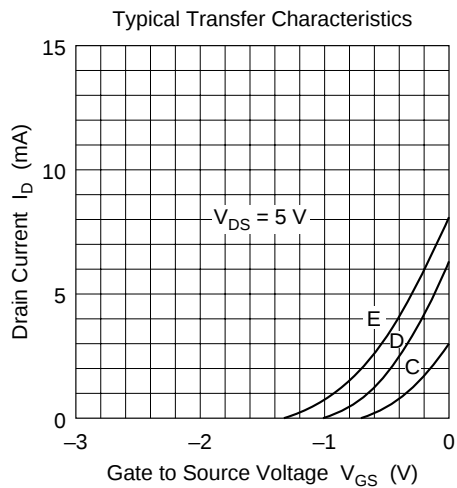
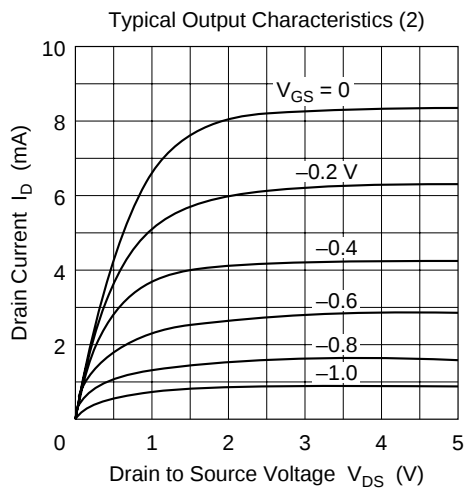
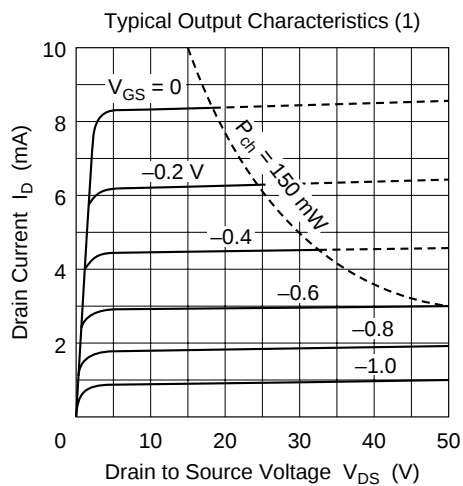
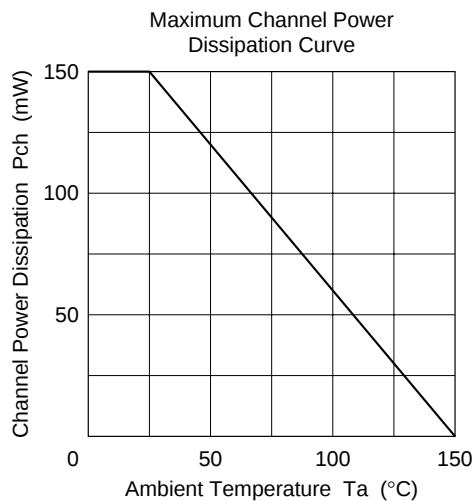
Item	Symbol	Ratings	Unit
Gate to drain current	V_{GDO}	−30	V
Drain current	I_D	20	mA
Gate current	I_G	10	mA
Channel power dissipation	Pch	150	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	−55 to +150	°C

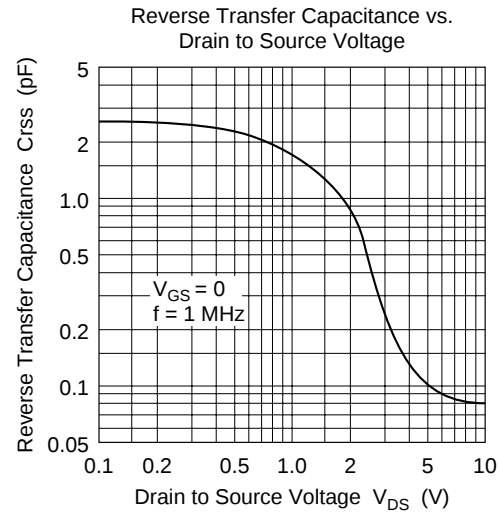
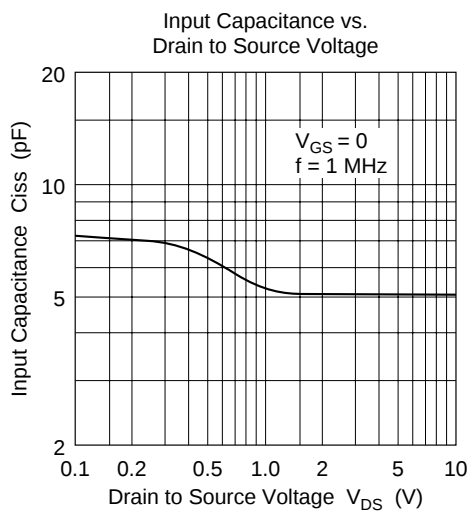
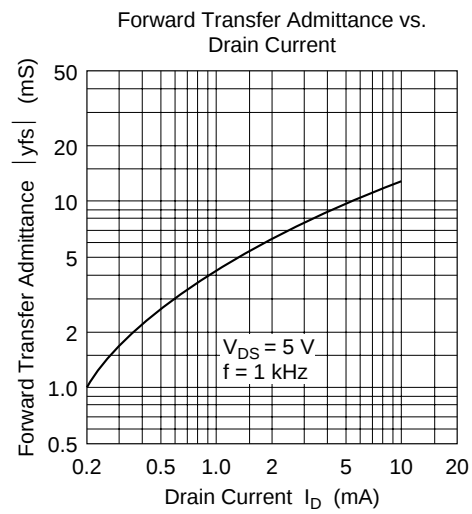
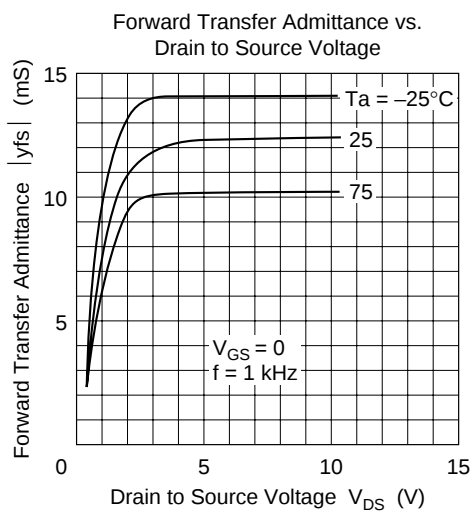
Electrical Characteristics (Ta = 25°C)

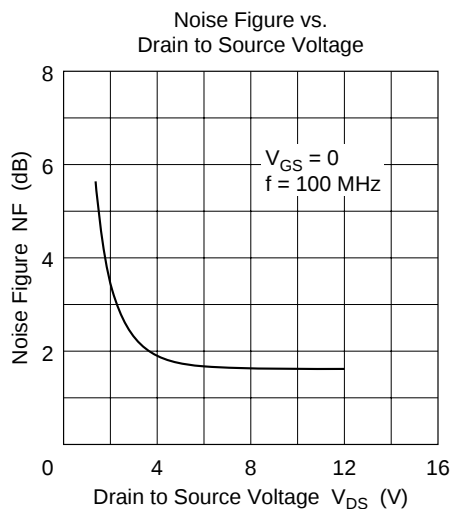
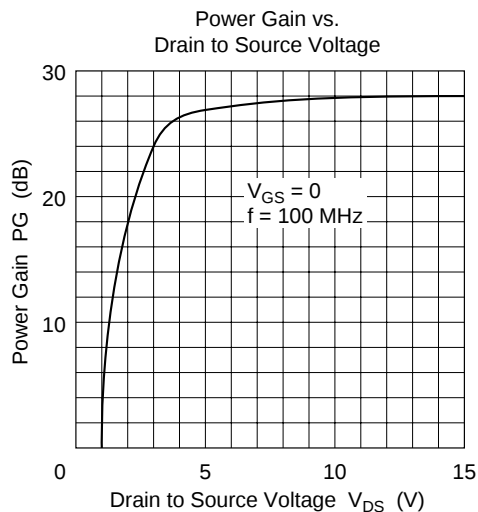
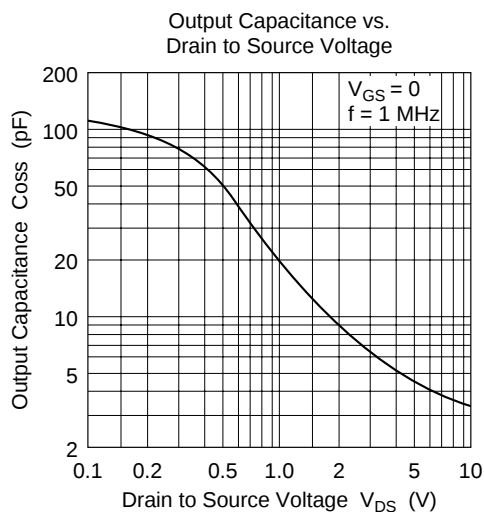
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Gate to drain breakdown voltage	$V_{(BR)GDO}$	−30	—	—	V	$I_G = -100\ \mu A$
Gate cutoff current	I_{GSS}	—	—	−10	nA	$V_{GS} = -0.5\ V, V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	—	—	−2.5	V	$V_{DS} = 5\ V, I_D = 10\ \mu A$
Drain current	I_{DSS}^{*1}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

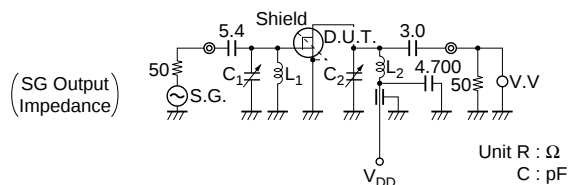
Grade	C	D	E
Mark	ZC	ZD	ZE
I_{DSS}	2.5 to 5	4 to 8	6 to 12



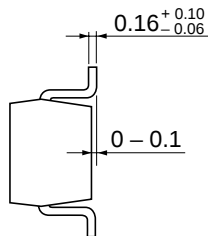
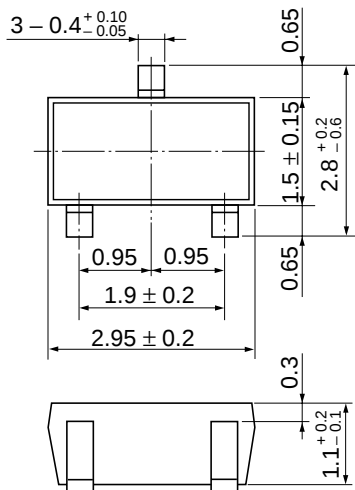




Power Gain and Noise Figure
Test Circuit



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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