

# 2SK360

# Silicon N-Channel MOS FET

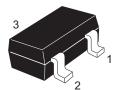
REJ03G0811-0200 (Previous ADE-208-1170) Rev.2.00 Aug.10.2005

## **Application**

VHF amplifier

### **Outline**

RENESAS Package code: PLSP0003ZB-A (Package name: MPAK)



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

# **Absolute Maximum Ratings**

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

Item	Symbol	Ratings	Unit
Drain to source voltage	V <sub>DSX</sub> *1	20	V
Gate to source voltage	$V_{GSS}$	±5	V
Drain current	I <sub>D</sub>	30	mA
Gate current	I <sub>G</sub>	±1	mA
Channel power dissipation	Pch	150	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	−55 to +150	°C

Note: 1.  $V_{GS} = -4 \text{ V}$ 

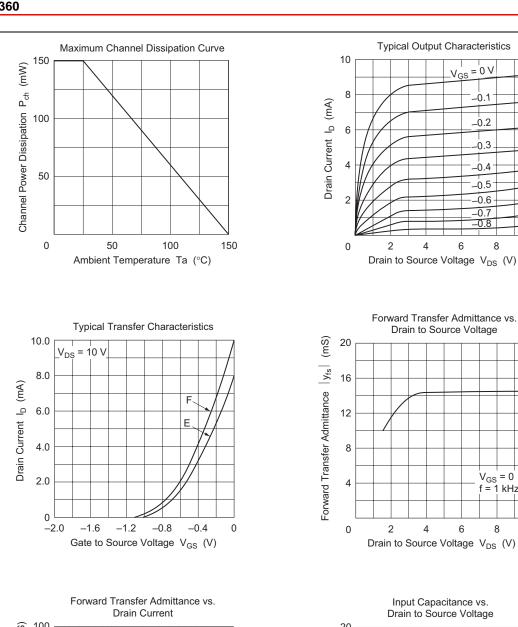
#### **Electrical Characteristics**

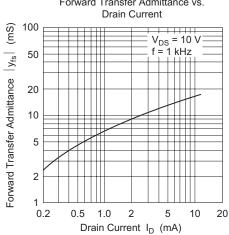
 $(Ta = 25^{\circ}C)$ 

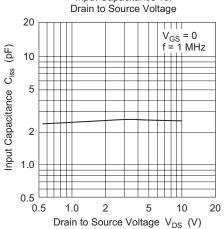
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Drain to source breakdown voltage	$V_{(BR)DSX}$	20	_	_	V	$I_D = 100  \mu  A,  V_{GS} = -4  V$
Gate cutoff current	I <sub>GSS</sub>	_	_	±20	nA	$V_{GS} = \pm 5 \text{ V}, V_{DS} = 0$
Drain current	I <sub>DSS</sub> *1	6	_	12	mA	$V_{DS} = 10 \text{ V}, V_{GS} = 0$
Gate to source cutoff voltage	V <sub>GS(off)</sub>	0	_	-2.0	V	$V_{DS} = 10 \text{ V}, I_{D} = 10 \mu\text{A}$
Forward transfer admittance	y <sub>fs</sub>	8	14	_	mS	$V_{DS} = 10 \text{ V}, V_{GS} = 0,$
						f = 1 kHz
Input capacitance	Ciss	_	2.5	_	pF	$V_{DS} = 10 \text{ V}, V_{GS} = 0,$
Output capacitance	Coss	_	1.6	_	pF	f = 1 MHz
Reverse transfer capacitance	Crss	_	0.03	_	pF	
Power gain	PG	_	30	_	dB	$V_{DS} = 10 \text{ V}, V_{GS} = 0,$
Noise figure	NF	_	2.0	_	dB	f = 100 MHz

Note: 1. The 2SK360 is grouped by I<sub>DSS</sub> as follows.

Grade	E	F
Mark	IGE	IGF
I <sub>DSS</sub>	6 to 10	8 to 12







 $V_{GS} = 0 V$ 

-0.1

-0.2

-0.3

-0.4

\_0.5

-0.6

8

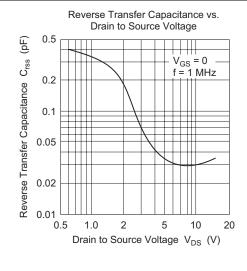
 $V_{GS} = 0$ f = 1 kHz

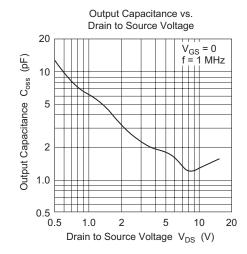
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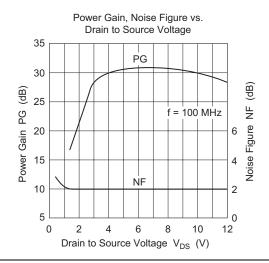
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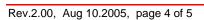
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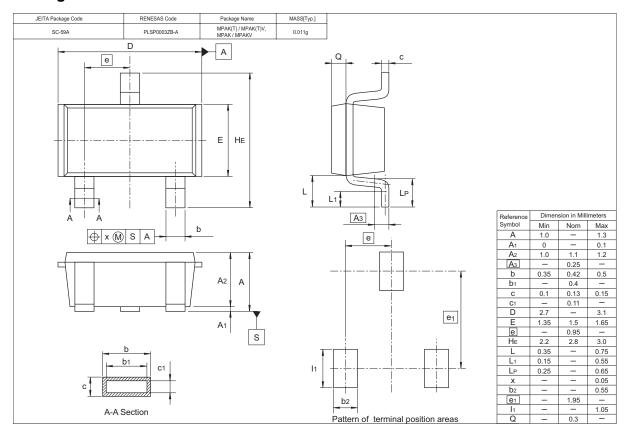








# **Package Dimensions**



# **Ordering Information**

Part Name	Quantity	Shipping Container		
2SK360IGETL	3000	φ178mm Reel , 8mm Emboss Taping		
2SK360IGFTL	3000	φ178mm Reel , 8mm Emboss Taping		

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.

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