

2SK1070

Silicon N-Channel Junction FET

REJ03G0574-0200 (Previous ADE-208-1175 (Z)) Rev.2.00 Mar.14.2005

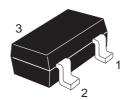
Application

• Low frequency / High frequency amplifier

Outline

RENESAS Package code: PLSP0003ZB-A

(Package name: MPAK)



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

Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Gate to drain voltage	V_{GDO}	-22	V
Gate to source voltage	V _{GSO}	-22	V
Drain current	I _D	50	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

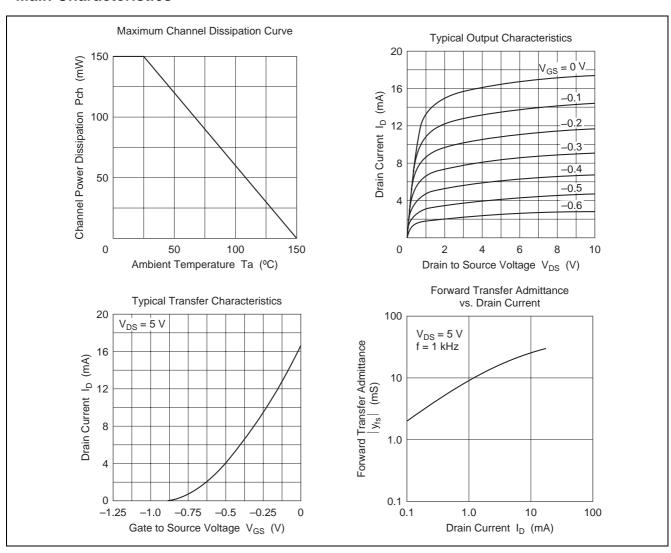
 $(Ta = 25^{\circ}C)$

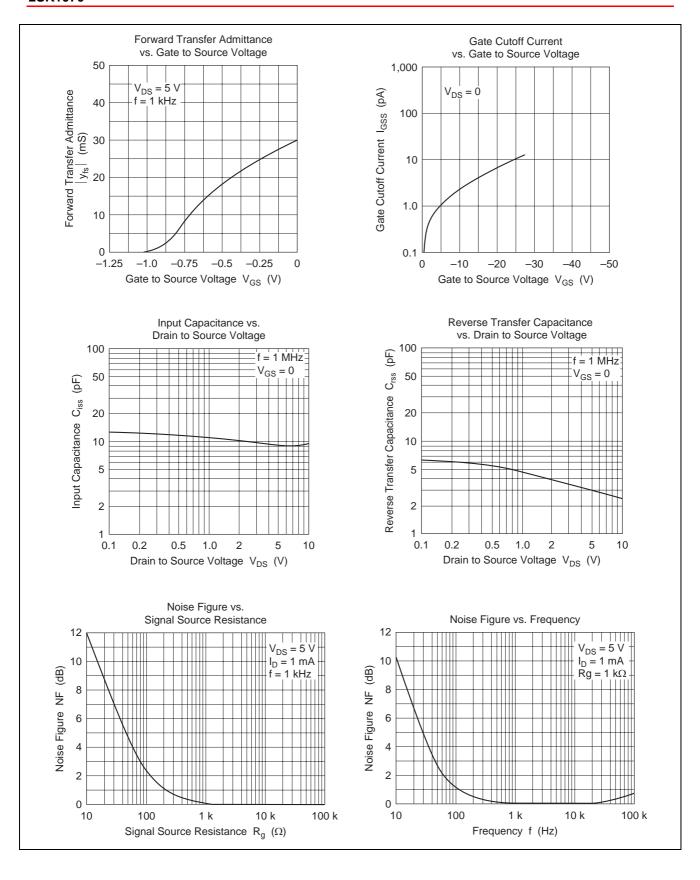
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Gate cutoff current	I _{GSS}	_	_	-10	nA	$V_{GS} = -15 \text{ V}, V_{DS} = 0$
Gate to source breakdown voltage	$V_{(BR)GSS}$	-22	_	_	V	$I_G = -10 \ \mu A, \ V_{DS} = 0$
Drain current	I _{DSS} *1	12		40	mA	$V_{DS} = 5 \text{ V}, V_{GS} = 0, \text{ Pulse test}$
Gate to source cutoff voltage	$V_{GS(off)}$	0	_	-2.5	V	$V_{DS} = 5 \text{ V}, I_{D} = 10 \mu\text{A}$
Forward transfer admittance	y _{fs}	20	30		mS	$V_{DS} = 5 \text{ V}, V_{GS} = 0, f = 1 \text{ kHz}$
Input capacitance	Ciss	_	9	_	pF	$V_{DS} = 5 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$

Notes: 1. The 2SK1070 is grouped by I_{DSS} as follows.

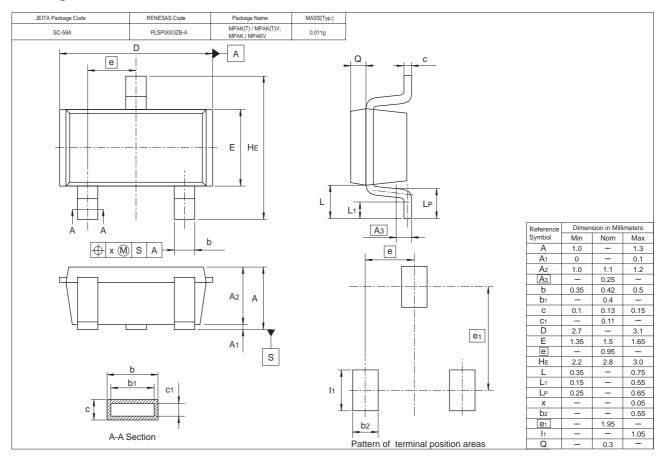
Grade	С	D	E		
Mark	PIC	PID	PIE		
I _{DSS}	12 to 22	18 to 30	27 to 40		

Main Characteristics





Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SK1070PICTL-E	3000	φ178 mm reel, 8 mm Emboss Taping
2SK1070PIDTL-E	3000	φ178 mm reel, 8 mm Emboss Taping
2SK1070PIETL-E	3000	φ178 mm reel, 8 mm 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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